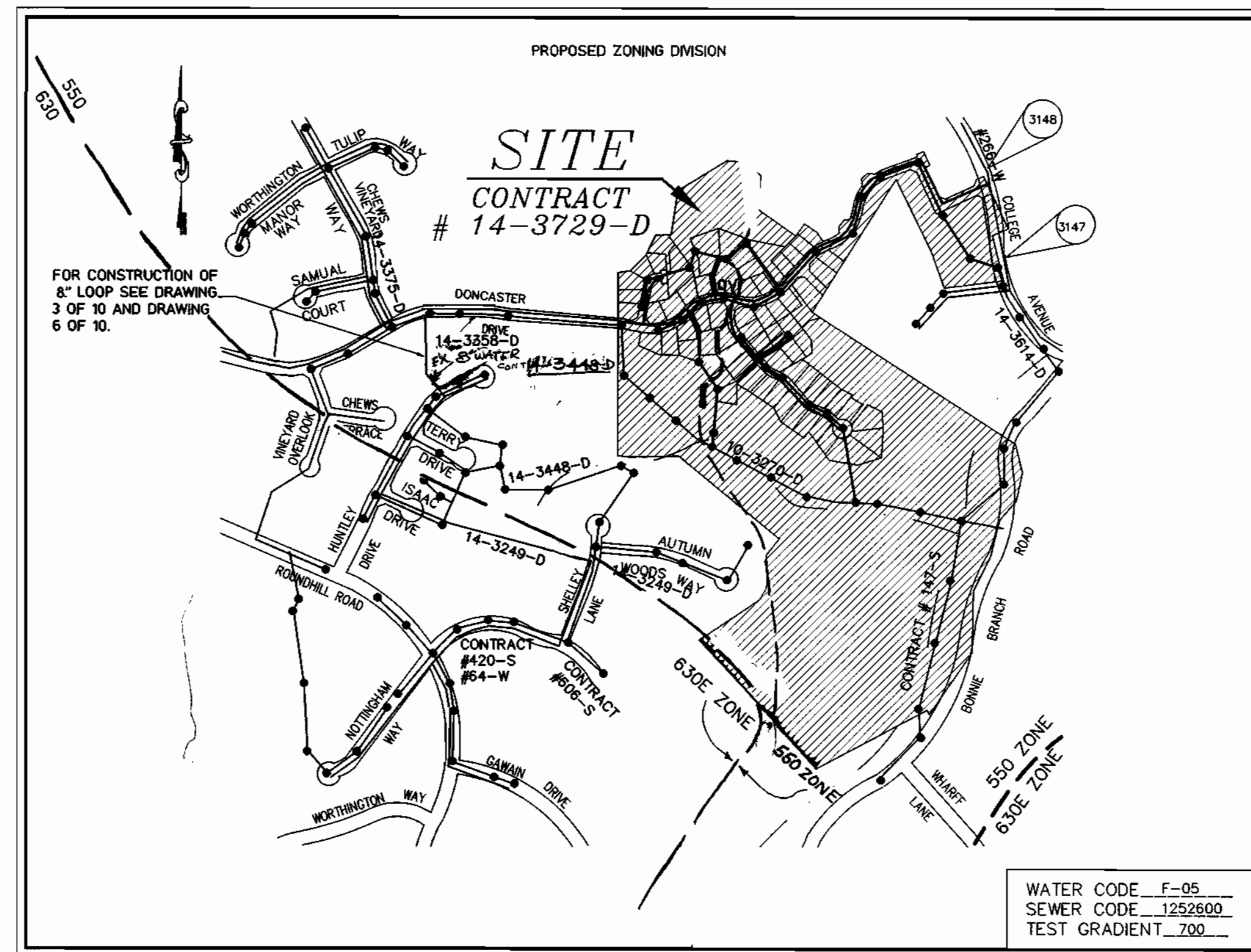


**QUANTITY TABLE**

ITEMS	QUANTITIES		TYPE	MANUFACTURER/SUPPLIER
	ESTIMATED	QUANTITIES		
STANDARD MH (HO. CO. STD. G-5.01)	22			
DROP MH, TYPE "B" (HO. CO. STD. S-1.32)	5			
TERMINAL MH (HO. CO. STD. S-1.31)	5			
MANHOLE, VERTICAL FEET	510 L.F.			
8" SEWER MAIN	2,296 L.F.			
8" DIP	2,792 L.F.			
4" SEWER HOUSE CONNECTION	2,171 L.F.			
# SEWER HOUSE CONNECTION	78 EACH			
# MH CONNECTIONS	14 EACH			
8" WATER	4,285 L.F.			
4" WATER	1,037 L.F.			
1" WATER HOUSE CONNECTION	1,816 L.F.			
1 1/2" WATER HOUSE CONNECTION	57 L.F.			
# 1" WHC	83 EACH			
# TWHC	2 EACH			
AIR RELEASE MH	1 EACH			
F.H.	9 EACH			
8" x 8" T	7 EACH			
8" x 6" T	9 EACH			
8" x 4" T	4 EACH			
8" V	18 EACH			
6" V	9 EACH			
4" V	7 EACH			
8" CAP & BUTTRESS	7 EACH			
4" CAP & BUTTRESS	3 EACH			
1/16 H.B. (8")	6 EACH			
1/8 H.B. (8")	2 EACH			
1/16 H.B. (4")	3 EACH			
12" X 8" TAPPING SLEEVE & VALVE	1 EACH			
8" X 8" TAPPING SLEEVE & VALVE	1 EACH			
NAME OF UTILITY CONTRACTOR:				
SURVEY AND DRAFTING DIVISION AS-BUILT DATE				



TYPE OF BUILDING	SFD
No. OF UNITS	72
No. OF WATER HOUSE CONNECTION	72
No. OF SEWER HOUSE CONNECTIONS	72
DRAINAGE AREA	BONNIE BRANCH, PATAPSCO
TREATMENT PLANT	PATAPSCO WASTEWATER TREATMENT PLANT, BALTIMORE

WATER CODE F-95  
SEWER CODE 1252800  
TEST GRADIENT .200

**GENERAL NOTES**

- APPROXIMATE LOCATION OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SUPPLY. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
- ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATES.
- ALL VERTICAL CONTROLS ARE BASED ON U.S.G.S. DATA.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- CLEAR ALL UTILITIES BY A MINIMUM OF 6". CLEAR ALL POLES BY 2'-0" MINIMUM OR TUNNEL AS REQUIRED. THE OWNER HAS CONTACTED THE UTILITY COMPANIES AND HAS MADE ARRANGEMENTS FOR BRACING OF POLES AS SHOWN ON THE DRAWINGS. IN THE EVENT THE CONTRACTOR'S WORK REQUIRES THE BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER FOR BRACING OF ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONEY OWED TO THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF THE POLES.
- FOR DETAILS NOT SHOWN ON THE DRAWINGS, AND FOR MATERIALS AND CONSTRUCTION METHODS USE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAIL FOR CONSTRUCTION (LATEST EDITION). THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB.
- WHERE TEST PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL [ ] AT THE LOCATION OF THE TEST PIT. A NOTE OR NOTES CONTAINING THE RESULTS OF THE TEST PIT OR PITS IS INCLUDED ON THE DRAWINGS. EXISTING UTILITIES IN THE VICINITY OF THE PROPOSED WORK FOR WHICH TEST PITS HAVE NOT BEEN DUG SHALL BE LOCATED BY THE CONTRACTOR TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS AT HIS OWN EXPENSE.
- CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:  
STATE HIGHWAY ADMINISTRATION (410) 531-5533  
BG & E CO. CONTRACTOR SERVICES (410) 850-4620  
BG & E CO. UNDERGROUND DAMAGE CONTROL (410) 787-9068  
MISS UTILITY 1-800-257-7777  
COLONIAL PIPELINE CO. (410) 795-1390  
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS (410) 313-4900  
BUREAU OF UTILITIES (410) 313-2450
- TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT. TREES AND SHRUBS LOCATED OUTSIDE THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
- CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OF THE MAIN.
- THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410)313-2450 AT LEAST FIVE (5) WORKING DAYS BEFORE ANY OPEN CUT OF ANY COUNTY ROAD OR BORING/JACKING OPERATION IN COUNTY ROADS FOR LAYING WATER/SEWER MAINS OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPW REQUIREMENTS PER SECTION 18.114(a) OF HOWARD COUNTY CODE.
- ALL WATER MAINS TO BE D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
- TOPS OF ALL WATER MAINS TO HAVE A MINIMUM OF 3-1/2" COVER UNLESS OTHERWISE NOTED.
- VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
- ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
- FIRE HYDRANTS SHALL BE SET TO THE BURY LINE ELEVATIONS SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE STRAPPED AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS. SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1000 AND 1005 OF THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
- ALL WATER HOUSE CONNECTIONS SHALL BE FOR INSIDE METER SETTING UNLESS OTHERWISE NOTED ON PLANS OR IN SPECIFICATIONS.
- FOR SPRINKLER SYSTEM FOR ALL TOWNHOMES OR MULTI-FAMILY DWELLING UNITS SHOULD HAVE A MINIMUM OF 1" CONNECTION WITH A 3/4" METER.
- ALL SEWER MAINS SHALL BE P.V.C. OR D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
- FORCE MAINS SHALL BE D.I.P. ONLY.
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVERS, STANDARD DETAIL 65.52. WHERE WATERTIGHT MANHOLE FRAME AND COVER IS USED, SET TOP OF FRAME 1' - 6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATES THAT CELLAR CANNOT BE SERVED.
- STATIONING SHOWN IS WATER MAIN AND CENTER LINE STATIONING.
- CONTRACTOR TO VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION.
- SEDIMENT CONTROL TO BE PROVIDED BY F-99-45.
- ALL SEWER HOUSE CONNECTIONS TO BE 4" IN SIZE.
- ALL WATER HOUSE CONNECTIONS TO BE 1" IN SIZE UNLESS OTHERWISE NOTED.
- ALL CELLARS WILL HAVE SERVICE TO LOWEST FLOOR UNLESS OTHERWISE NOTED.
- THE EXISTING WELL AND SEPTIC SERVICING EXISTING HOUSE(S) ARE TO BE ABANDONED.
- STORM DRAIN SYSTEM INDICATED FOR INFORMATIONAL PURPOSES ONLY, SEE ROAD PLANS FOR CONSTRUCTION DATA.
- COMPACTION IN FILL AREAS TO BE 95% AS DETERMINED PER AASHTO T-180.

**EROSION AND SEDIMENT CONTROL FOR THIS CONTRACT IS PROVIDED UNDER F-99-45**

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

*Bruce T. Taylor, Pres* 3/9/99  
DEVELOPER'S SIGNATURE DATE

DEVELOPER'S NAME

I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

*R. Jacob Hikmat* 2/25/99  
ENGINEER'S SIGNATURE DATE

ENGINEER'S NAME

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS.

*Cheryl Simmons* 3/8/99  
USDA-NATURAL RESOURCES CONSERVATION SERVICE DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE SOIL CONSERVATION DISTRICT.

*John R. Roberts* 3-8-99  
HOWARD SCD DATE

PLAN REFERENCE NUMBERS  
S-96-15  
P-98-10  
F-99-45

**CONTRACT NO.: 14-3729-D**

**AUTUMN VIEW, SECTION 3, LOTS 76-149**

**WATER AND SEWER MAIN EXTENSIONS**

**HOWARD COUNTY, MARYLAND**

**DEPARTMENT OF PUBLIC WORKS**

**INDEX OF DRAWINGS**

NO.	DESCRIPTION
1	TITLE SHEET
2	WATER AND SEWER PLAN
3	WATER AND SEWER PLAN
4	WATER PROFILES
5	WATER PROFILES
6	WATER PROFILES
7	SEWER PROFILES
8	SEWER PROFILES
9	SEWER PROFILES
10	SEWER PROFILES

97015 (DWG) FINAL W&S COVER

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND

**MILDENBERG, BOENDER & ASSOC., INC.**  
Engineers Planners Surveyors

5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042  
(410) 997-0296 Ball (301) 621-5521 Wash. (410) 997-0290 Fax

*Robert W. Bauman* 3-3-99  
CHIEF, BUREAU OF UTILITIES DATE DATE

*Cheryl Simmons* 3/1/99  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE DATE

engineering	MMP				
illustration	RCJ				
approval	RJH				
project	97015				
date	FEB. 1999	BY	NO.	REVISION	DATE

**TITLE SHEET**

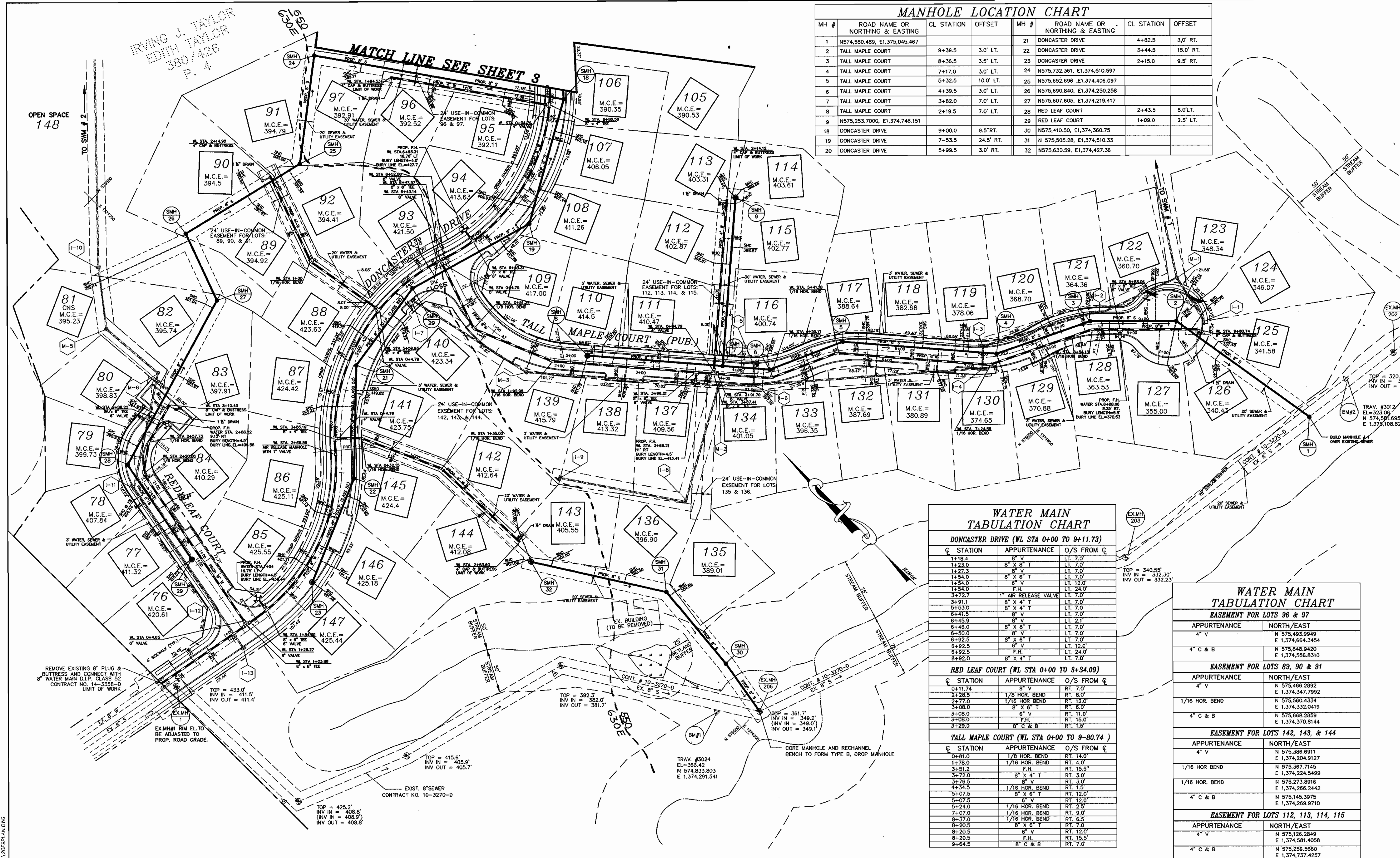
**AUTUMN VIEW, SECTION 3**  
LOTS 76 - 149  
CONTRACT NO.: 14-3729-D  
SECOND ELECTION DISTRICT  
HOWARD COUNTY

scale AS SHOWN  
**1 OF 10**

IRVING J. TAYLOR  
EDITH TAYLOR  
380/426  
P. 4

### MANHOLE LOCATION CHART

MH #	ROAD NAME OR NORTHING & EASTING	CL STATION	OFFSET	MH #	ROAD NAME OR NORTHING & EASTING	CL STATION	OFFSET
1	N574,580.489, E1,375,045.467			21	DONCASTER DRIVE	4+82.5	3.0' RT.
2	TALL MAPLE COURT	9+39.5	3.0' LT.	22	DONCASTER DRIVE	3+44.5	15.0' RT.
3	TALL MAPLE COURT	8+36.5	3.5' LT.	23	DONCASTER DRIVE	2+15.0	9.5' RT.
4	TALL MAPLE COURT	7+17.0	3.0' LT.	24	N575,732.361, E1,374,510.597		
5	TALL MAPLE COURT	5+32.5	10.0' LT.	25	N575,652.696, E1,374,406.097		
6	TALL MAPLE COURT	4+39.5	3.0' LT.	26	N575,690.840, E1,374,250.258		
7	TALL MAPLE COURT	3+82.0	7.0' LT.	27	N575,607.605, E1,374,219.417		
8	TALL MAPLE COURT	2+19.5	7.0' LT.	28	RED LEAF COURT	2+43.5	8.0' LT.
9	N575,253.7000, E1,374,746.151			29	RED LEAF COURT	1+09.0	2.5' LT.
18	DONCASTER DRIVE	9+00.0	9.5' RT.	30	N575,410.50, E1,374,360.75		
19	DONCASTER DRIVE	7-53.5	24.5' RT.	31	N 575,505.28, E1,374,510.33		
20	DONCASTER DRIVE	5+99.5	3.0' RT.	32	N575,630.59, E1,374,427.36		



### WATER MAIN TABULATION CHART

DONCASTER DRIVE (WL STA 0+00 TO 9+11.73)

CL STATION	APPURTENANCE	O/S FROM CL
1+18.4	8" V	LT. 7.0'
1+23.0	8" X 8" T	LT. 7.0'
1+27.3	8" V	LT. 7.0'
1+54.0	8" X 6" T	LT. 7.0'
1+54.0	6" V	LT. 12.0'
1+54.0	F.H.	LT. 24.0'
3+72.7	1" AIR RELEASE VALVE	LT. 7.0'
3+91.1	8" X 4" T	LT. 7.0'
5+53.0	8" X 4" T	LT. 7.0'
6+41.5	8" V	LT. 7.0'
6+45.9	8" V	LT. 2.1'
6+46.0	8" X 8" T	LT. 7.0'
6+50.0	8" V	LT. 7.0'
6+92.5	8" X 6" T	LT. 7.0'
6+92.5	6" V	LT. 12.0'
6+92.5	F.H.	LT. 24.0'
8+92.0	8" X 4" T	LT. 7.0'

RED LEAF COURT (WL STA 0+00 TO 3+34.09)

CL STATION	APPURTENANCE	O/S FROM CL
0+11.74	8" V	RT. 7.0'
2+28.5	1/8 HOR. BEND	RT. 8.0'
2+77.0	1/16 HOR. BEND	RT. 12.0'
3+08.0	8" X 6" T	RT. 6.0'
3+08.0	6" V	RT. 11.0'
3+08.0	F.H.	RT. 15.0'
3+29.0	8" C & B	RT. 1.5'

TALL MAPLE COURT (WL STA 0+00 TO 9-80.74)

CL STATION	APPURTENANCE	O/S FROM CL
0+81.0	1/8 HOR. BEND	RT. 14.0'
1+78.0	1/16 HOR. BEND	RT. 4.0'
3+51.2	F.H.	RT. 15.5'
3+72.0	8" X 4" T	RT. 3.0'
3+76.5	8" V	RT. 3.0'
4+34.5	1/16 HOR. BEND	RT. 1.5'
5+07.5	8" X 6" T	RT. 12.0'
5+07.5	6" V	RT. 12.0'
5+24.0	1/16 HOR. BEND	RT. 2.5'
7+07.0	1/16 HOR. BEND	RT. 9.0'
8+37.0	1/16 HOR. BEND	RT. 6.5'
8+20.5	8" X 6" T	RT. 7.0'
8+20.5	6" V	RT. 12.0'
8+20.5	F.H.	RT. 15.5'
9+54.5	8" C & B	RT. 7.0'

### WATER MAIN TABULATION CHART

#### EASEMENT FOR LOTS 96 & 97

APPURTENANCE	NORTH/EAST
4" V	N 575,493.9949 E 1,374,664.3454
4" C & B	N 575,648.9420 E 1,374,556.8310

#### EASEMENT FOR LOTS 89, 90 & 91

APPURTENANCE	NORTH/EAST
4" V	N 575,466.2892 E 1,374,347.7992
1/16 HOR. BEND	N 575,560.4334 E 1,374,332.0419
4" C & B	N 575,668.2859 E 1,374,370.8144

#### EASEMENT FOR LOTS 142, 143, & 144

APPURTENANCE	NORTH/EAST
4" V	N 575,386.6811 E 1,374,204.9127
1/16 HOR. BEND	N 575,367.7145 E 1,374,224.5499
1/16 HOR. BEND	N 575,273.8916 E 1,374,266.2442
4" C & B	N 575,145.3975 E 1,374,269.9710

#### EASEMENT FOR LOTS 112, 113, 114, 115

APPURTENANCE	NORTH/EAST
4" V	N 575,126.2849 E 1,374,581.4058
4" C & B	N 575,259.5660 E 1,374,737.4257

### WATER MAIN TABULATION CHART

DONCASTER DRIVE (WL STA 9+07.07 TO 24+53.21)		
STATION	APPURTENANCE	O/S FROM C
10+49.85	8" V	LT. 7.0'
10+54.0	8" X 8" T	LT. 7.0'
10+54.1	8" V	LT. 2.1'
10+58.5	8" V	LT. 7.0'
11+06.5	8" X 6" T	LT. 7.0'
11+06.5	6" V	LT. 12.0'
11+06.5	F.H.	LT. 15.0'
13+75.1	8" V	LT. 7.0'
13+79.5	8" X 8" T	LT. 7.0'
13+84.2	8" V	LT. 7.0'
16+20.5	8" X 6" T	LT. 7.0'
16+20.5	6" V	LT. 12.0'
16+20.5	F.H.	LT. 15.5'
16+61.3	8" V	LT. 7.0'
16+65.5	8" X 8" T	LT. 7.0'
16+69.9	8" V	LT. 7.0'
N 576.187, 878	8" X 8" T	LT. 7.0'
E 1,375.394, 729	8" X 8" B	LT. 7.0'
19+62.0	8" X 6" T	LT. 7.0'
19+62.0	6" V	LT. 2.0'
19+62.0	F.H.	RT. 15.0'
21+77.0	8" X 8" T	LT. 7.0'
21+82.58	8" V	LT. 7.0'
24+07.5	8" X 6" T	LT. 7.0'
24+07.5	6" V	LT. 12.0'
24+07.5	F.H.	LT. 15.5'
24+57.0	12" X 8" TAPPING SLEEVE & VALVE	LT. 7.0'

HAZEL NUT LANE (WL STA 0+00 TO STA 1+85.47)		
STATION	APPURTENANCE	O/S FROM C
1+78.9	8" C & B	RT. 7.0'

FUTURE ROAD A (WL STA 0+00 TO STA 0+53.62)		
STATION	APPURTENANCE	O/S FROM C
0+12.0	8" V	LT. 6.74'
0+61.0	8" C & B	LT. 7.0'

FUTURE ROAD C (WL STA 0+00 TO STA 0+52.10)		
STATION	APPURTENANCE	O/S FROM C
0+11.93	8" V	RT. 7.0'
0+59.5	8" C & B	RT. 7.0'

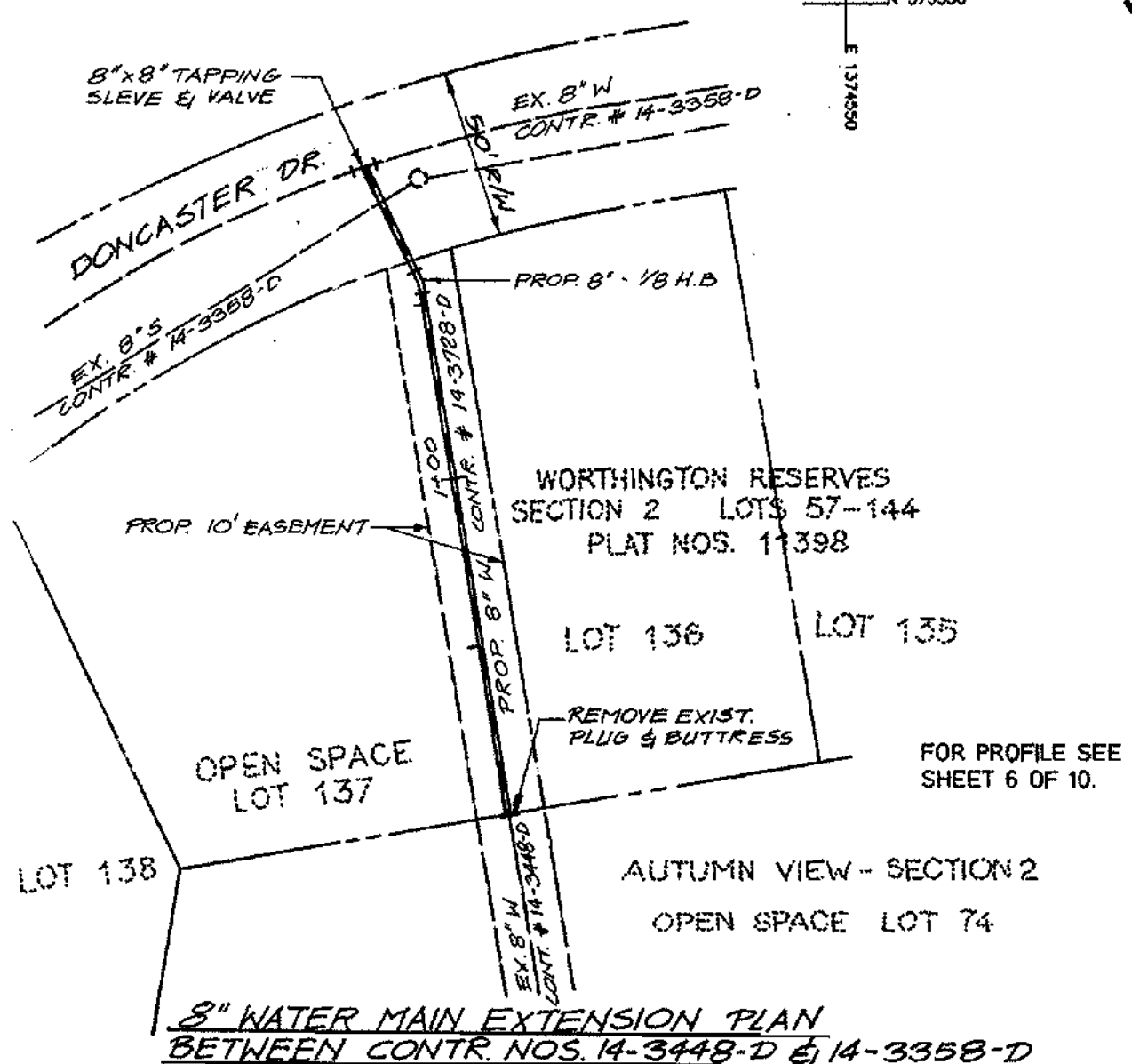
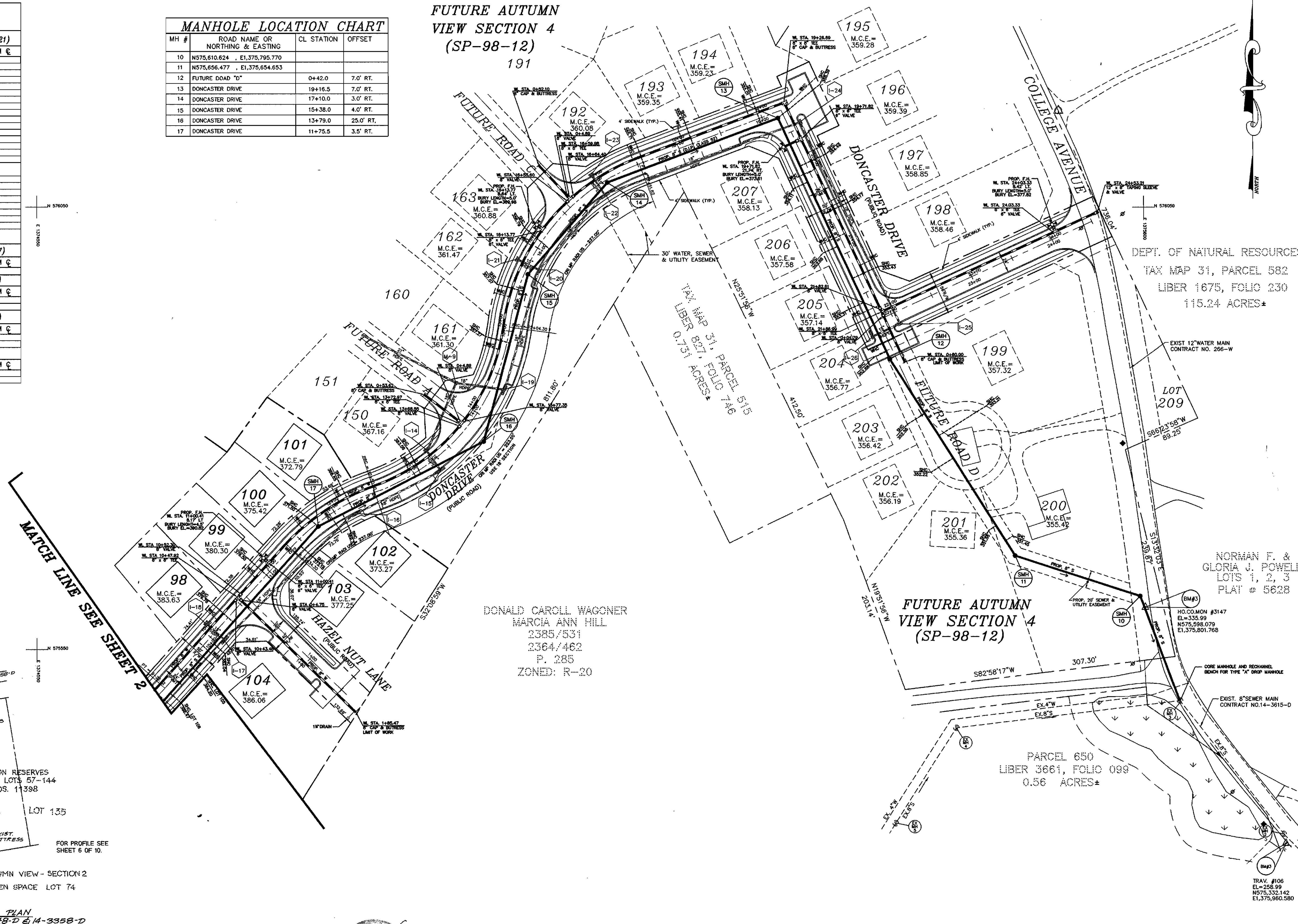
  

FUTURE ROAD D (WL STA 0+00 TO STA 0+60)		
STATION	APPURTENANCE	O/S FROM C
0+04.8	8" V	LT. 7.0'
0+55.5	8" C & B	LT. 7.0'

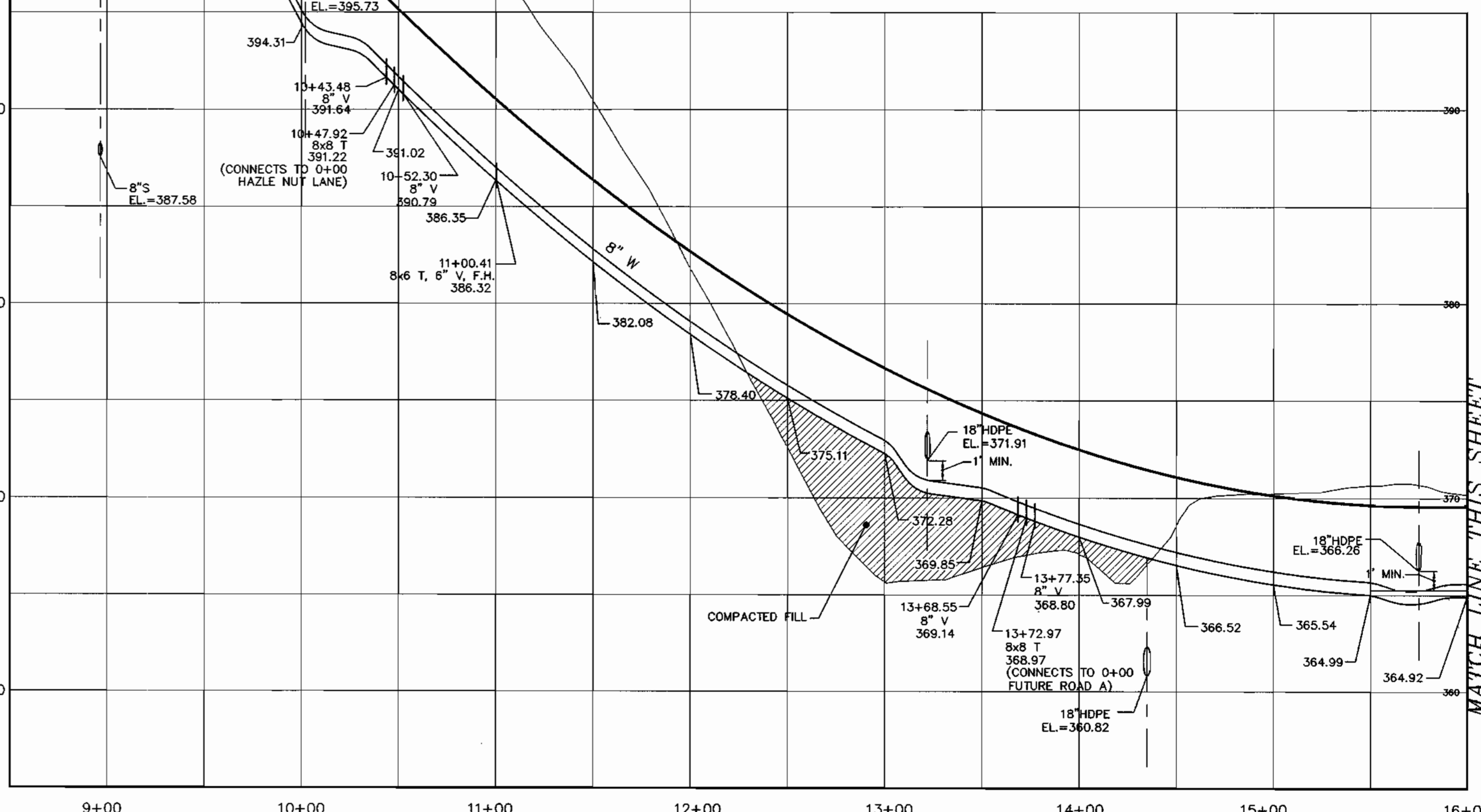
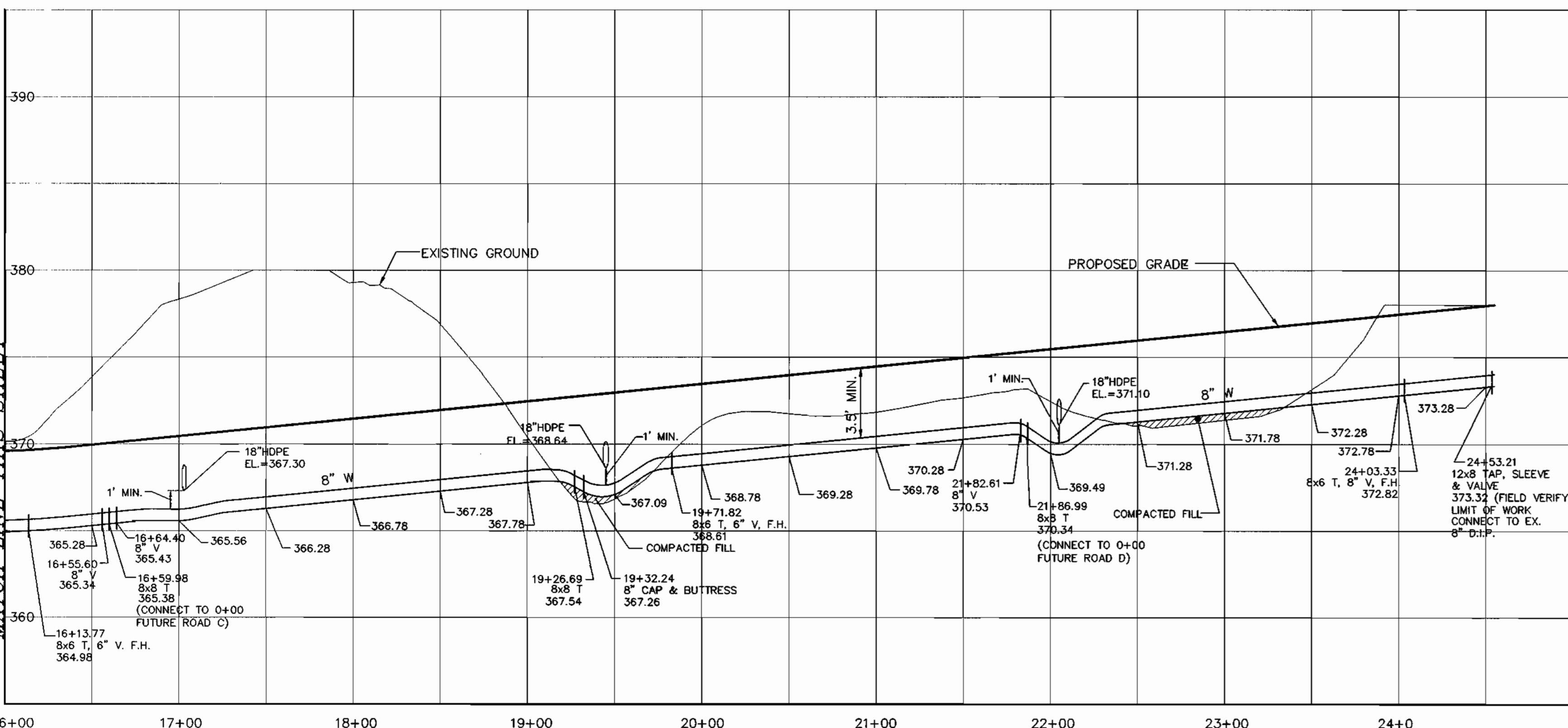
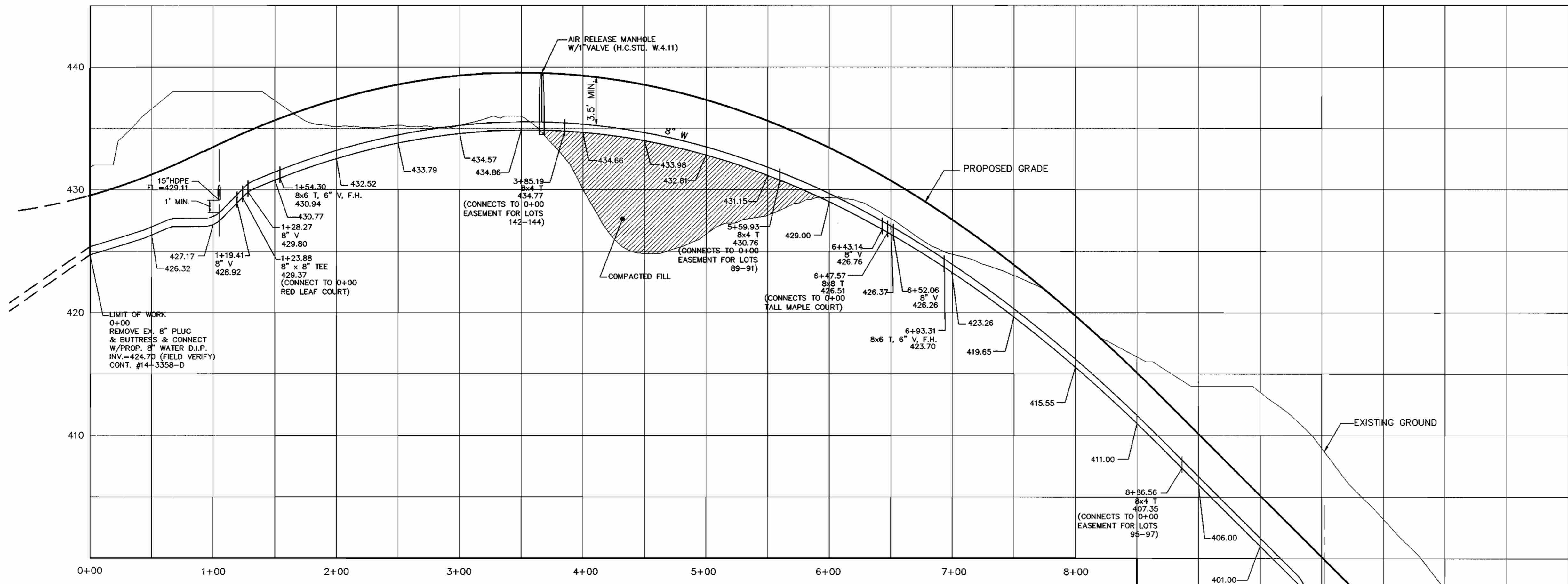
### MANHOLE LOCATION CHART

MH #	ROAD NAME OR NORTHING & EASTING	CL STATION	OFFSET
10	N575,610.624 , E1,375,795.770		
11	N575,656.477 , E1,375,654.653		
12	FUTURE DDOAD "D"	0+42.0	7.0' RT.
13	DONCASTER DRIVE	19+16.5	7.0' RT.
14	DONCASTER DRIVE	17+10.0	3.0' RT.
15	DONCASTER DRIVE	15+38.0	4.0' RT.
16	DONCASTER DRIVE	13+79.0	25.0' RT.
17	DONCASTER DRIVE	11+75.5	3.5' RT.

### FUTURE AUTUMN VIEW SECTION 4 (SP-98-12)



DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Robert W. Brunner 3-3-99 CHIEF, BUREAU OF UTILITIES DATE	DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND [Signature] 3/5/99 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE	<b>MILDENBERG, BOENDER &amp; ASSOC., INC.</b> Engineers Planners Surveyors 5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042 (410) 987-0286 Bull. (301) 621-5321 Wash. (410) 987-0286 Fax	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>engineering</td><td>MMP</td></tr> <tr><td>illustration</td><td>RJ</td></tr> <tr><td>approval</td><td>RJH</td></tr> <tr><td>project</td><td>97015</td></tr> <tr><td>date</td><td>FEB. 1999</td></tr> </table>	engineering	MMP	illustration	RJ	approval	RJH	project	97015	date	FEB. 1999	<h2 style="margin: 0;">WATER AND SEWER PLAN</h2>	<h2 style="margin: 0;">AUTUMN VIEW, SECTION 3</h2> <p style="margin: 0;">LOTS 76 - 149 CONTRACT NO.: 14-3728-D SECOND ELECTION DISTRICT HOWARD COUNTY</p>	scale 1" = 50' <b>3 of 10</b>
engineering	MMP															
illustration	RJ															
approval	RJH															
project	97015															
date	FEB. 1999															



**8" WATER PROFILE (DONCASTER DRIVE)**

SCALE: HOR. 1"=50'  
VER. 1"=5'

**8" WATER PROFILE (DONCASTER DRIVE)**

SCALE: HOR. 1"=50'  
VER. 1"=5'

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
*Robert Benner* 3-3-99  
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND  
*John A. ...* 3/5/99  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

**MILDENBERG, BOENDER & ASSOC., INC.**  
Engineers Planners Surveyors  
5872 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042  
(410) 997-0256 Fax (301) 621-5521 Wash. (410) 997-0288 Fax



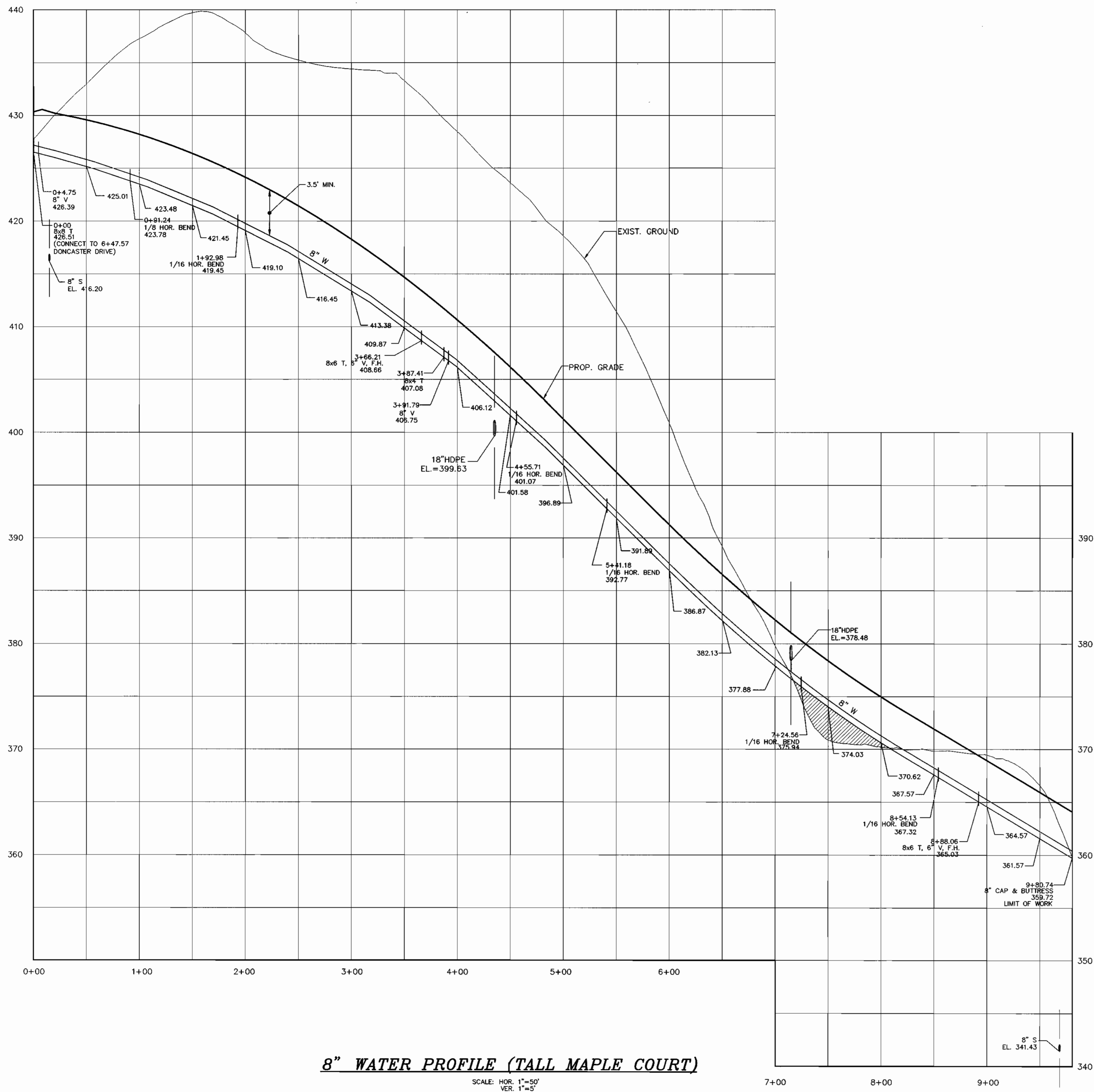
engineering	MMP				
illustration	RJ				
approval	RJH				
project	97015				
date	FEB.1999	BY	NO.	REVISION	DATE

**WATER PROFILES**  
600' SCALE MAP NO. 31 BLOCK NO. 3, 4

**AUTUMN VIEW, SECTION 3**  
LOTS 76 -149  
CONTRACT NO.: 14-3729-D  
SECOND ELECTION DISTRICT  
HOWARD COUNTY

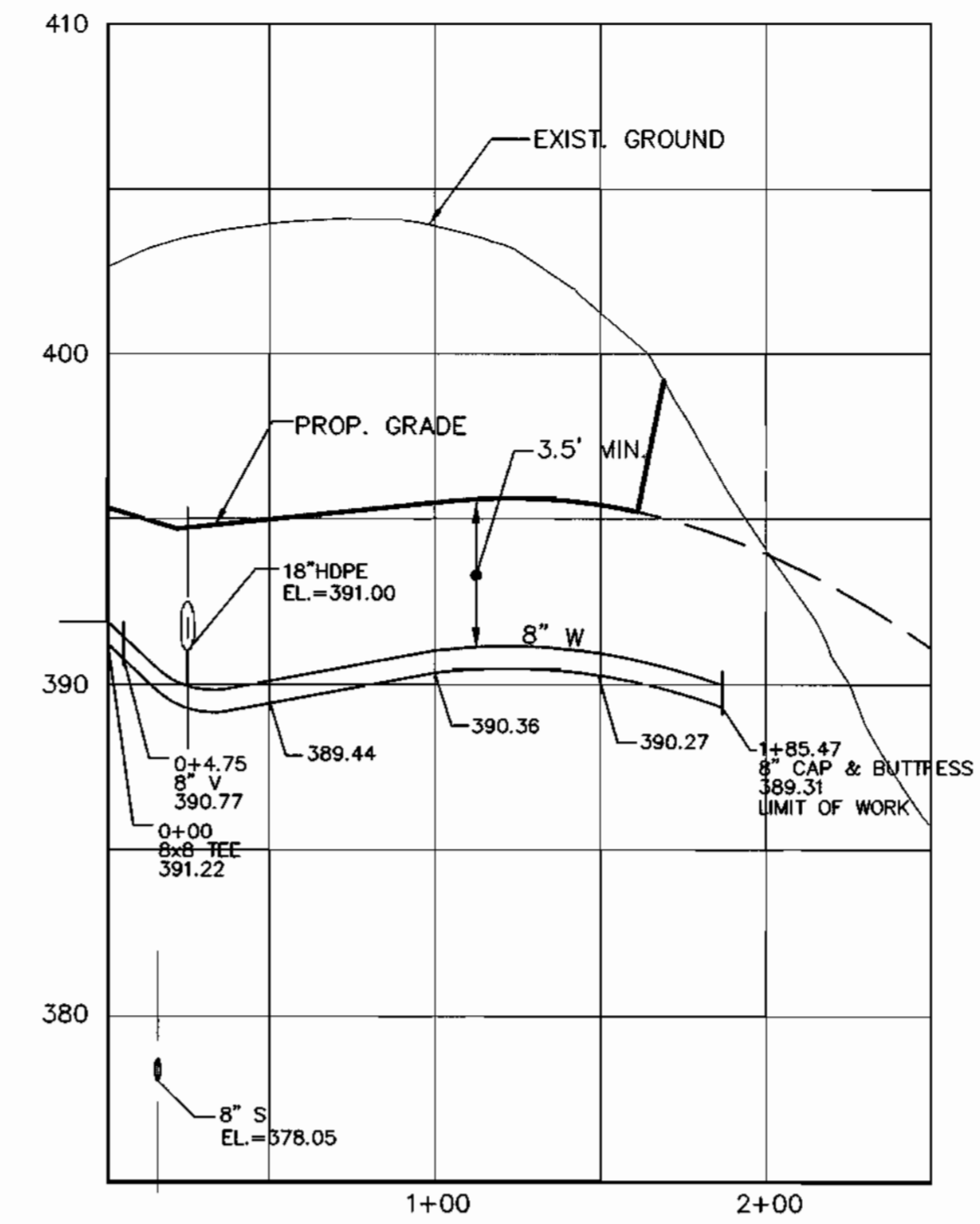
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VER. 1"=5'  
**4 of 10**

97015 (DWG) FINAL (MKS) / 4033 WATER PROFILES



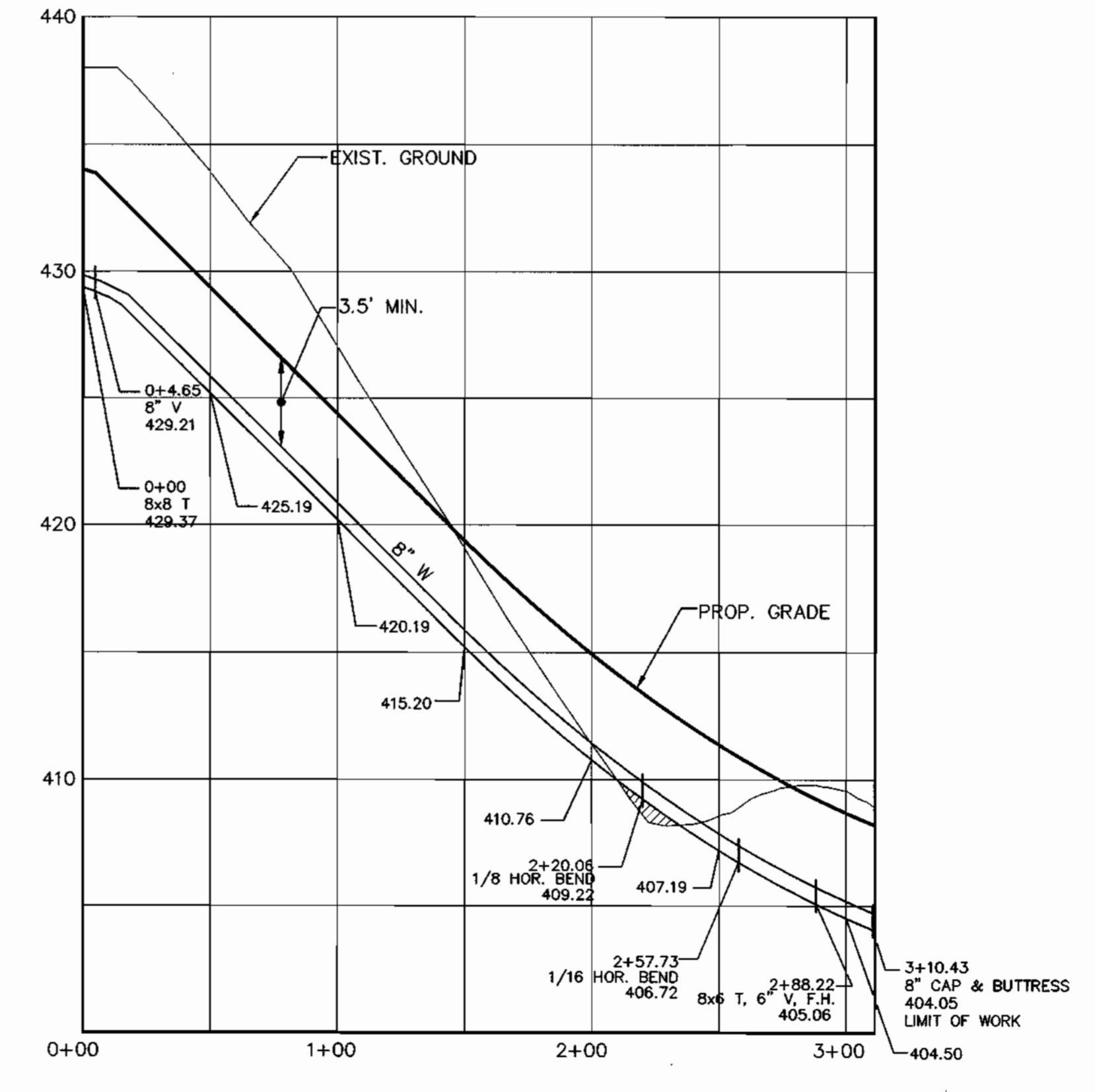
**8" WATER PROFILE (TALL MAPLE COURT)**

SCALE: HOR. 1"=50'  
VER. 1"=5'



**8" WATER PROFILE (HAZEL NUT LANE)**

SCALE: HOR. 1"=50'  
VER. 1"=5'



**8" WATER PROFILE (RED LEAF COURT)**

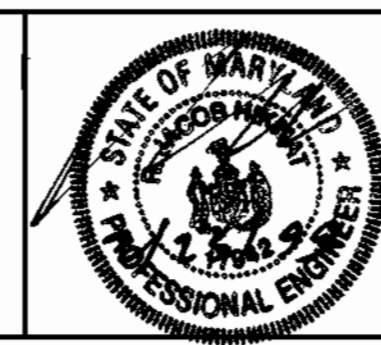
SCALE: HOR. 1"=50'  
VER. 1"=5'

97015 (DWG) FINAL (VMS) SDF - 8" WATER PROFILES

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
3-3-99  
DATE

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND  
3/15/99  
DATE

**MILDENBERG, BOENDER & ASSOC., INC.**  
Engineers Planners Surveyors  
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042  
(410) 997-0296 Ball (301) 621-5521 Wash. (410) 997-0290 Fax

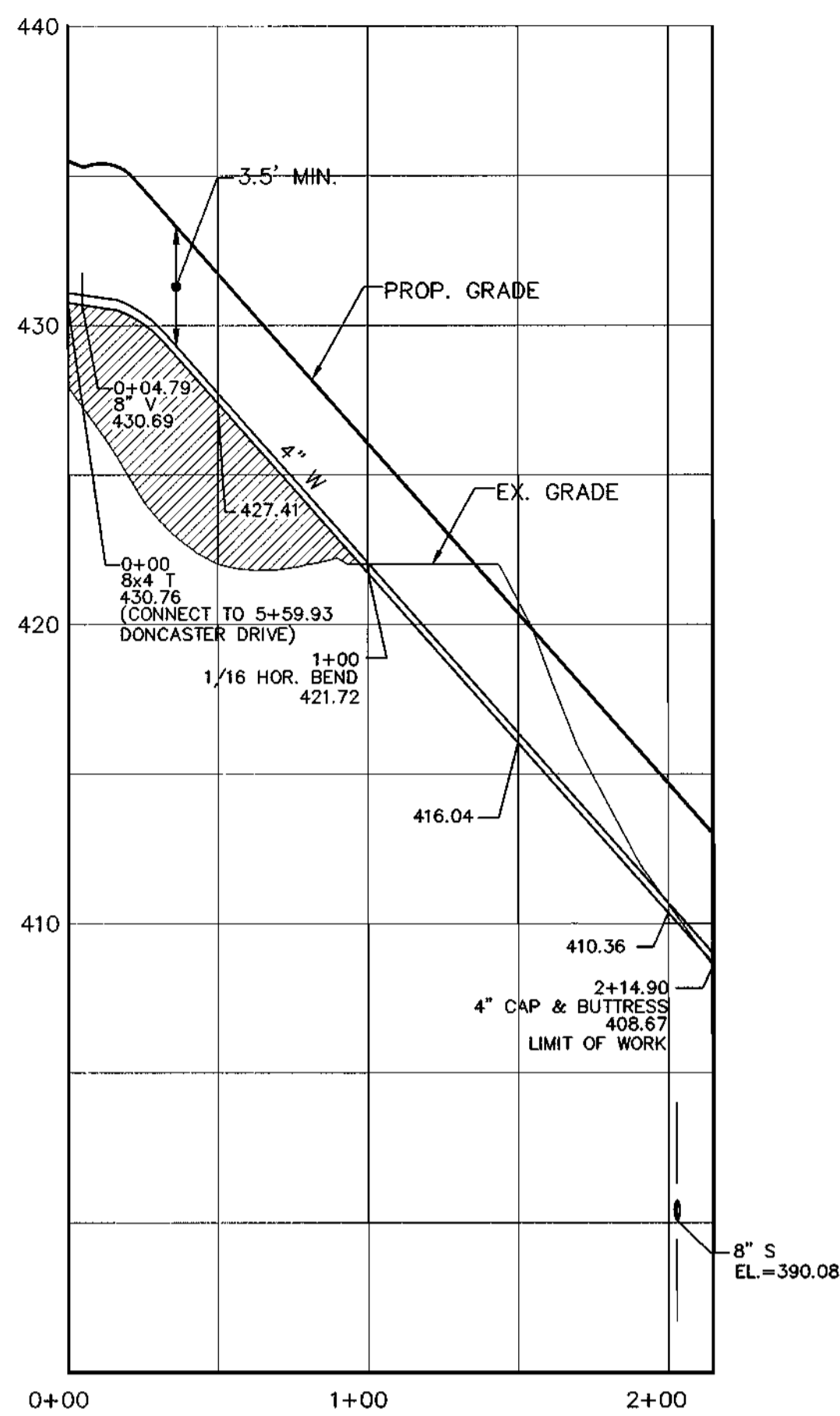


engineering	MMP				
illustration	RCJ				
approval	RJH				
project	97015				
date	FEB 1999	BY	NO.	REVISION	DATE

**WATER PROFILES**  
600' SCALE MAP NO. 31 BLOCK NO. 3, 4

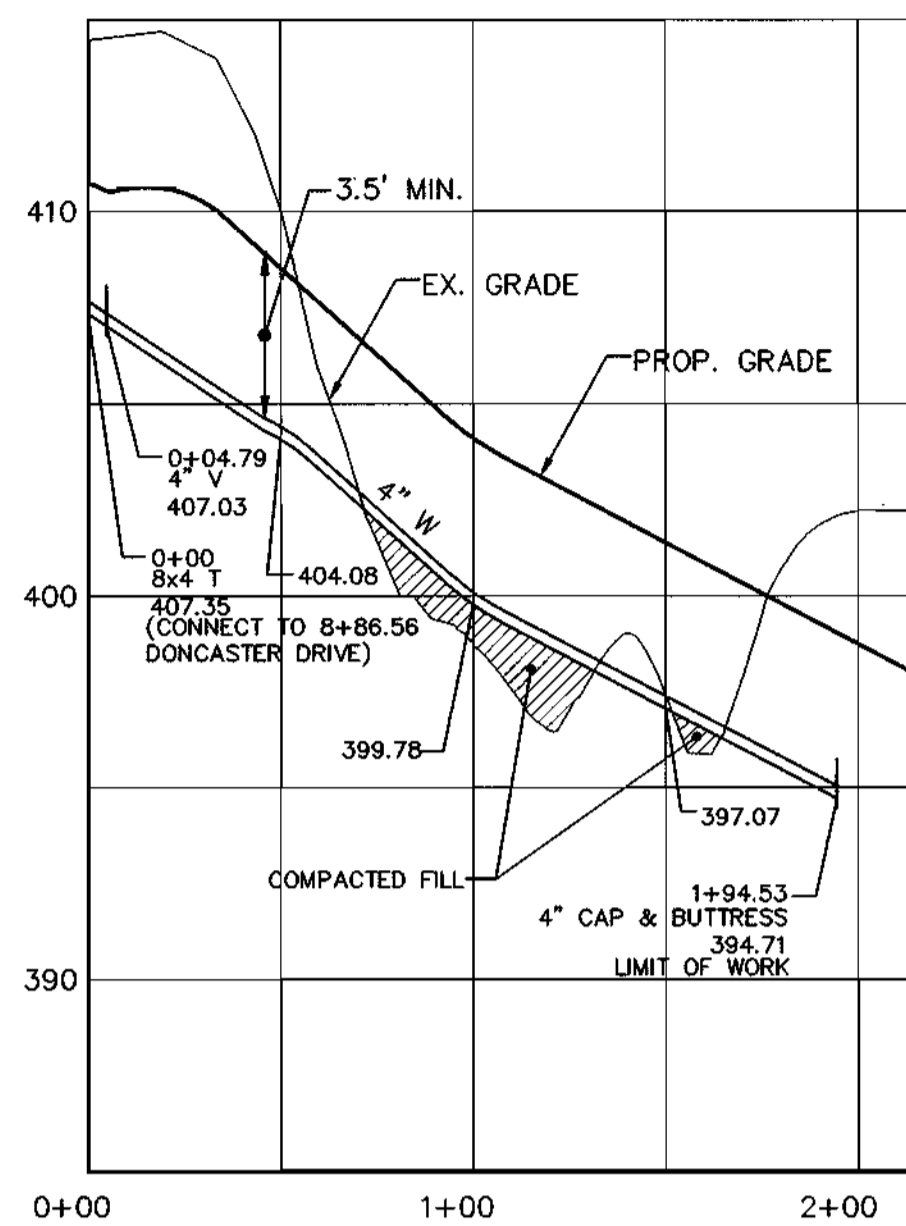
**AUTUMN VIEW, SECTION 3**  
LOTS 76 - 149  
CONTRACT NO.: 14-3729-D  
SECOND ELECTION DISTRICT  
HOWARD COUNTY

scale  
HOR. 1"=50'  
VER. 1"=5'  
**5 OF 10**



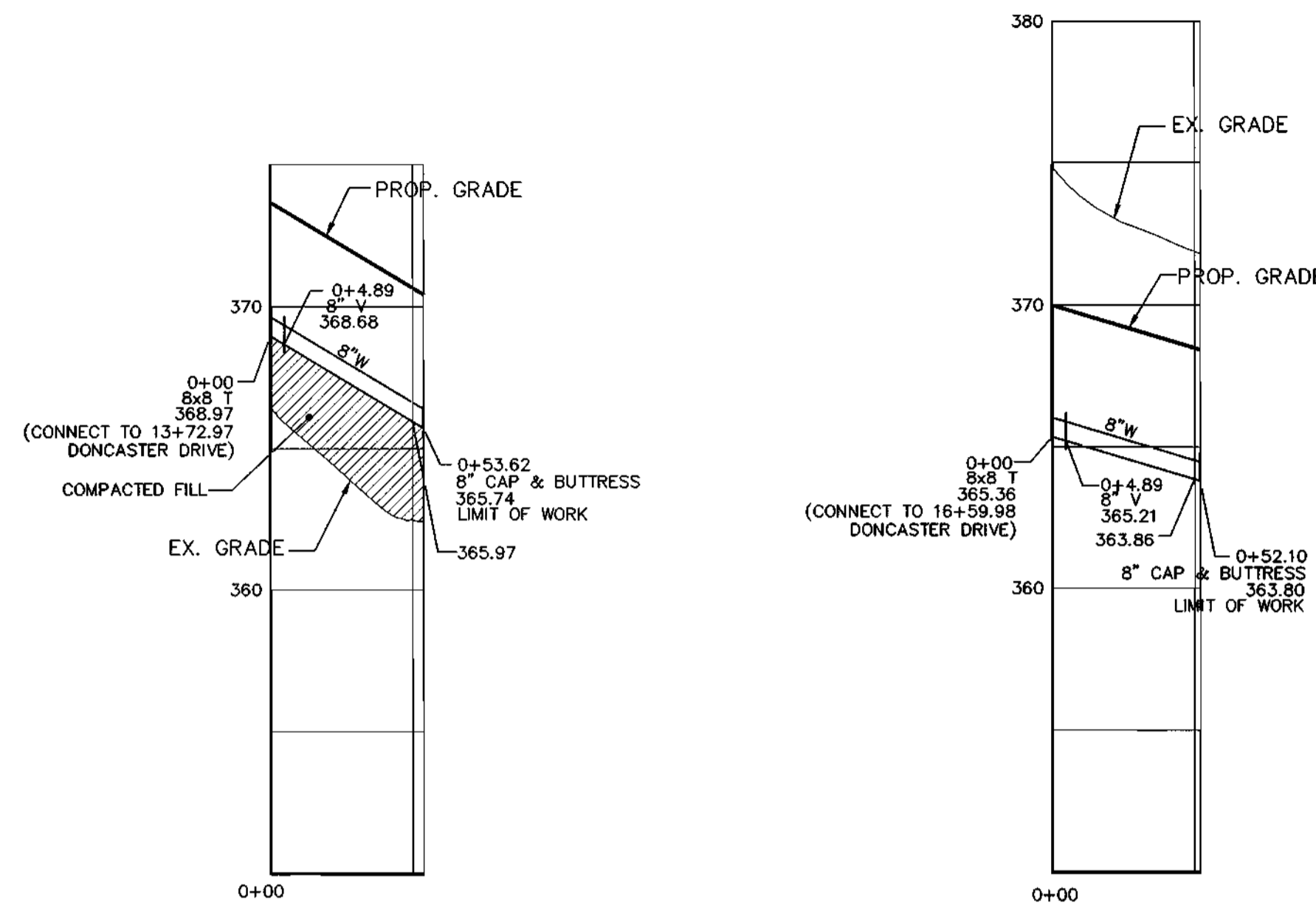
**4" WATER PROFILE  
EASEMENT FOR LOTS: 89, 90 & 91**

SCALE: HOR. 1"=50'  
VER. 1"=5'



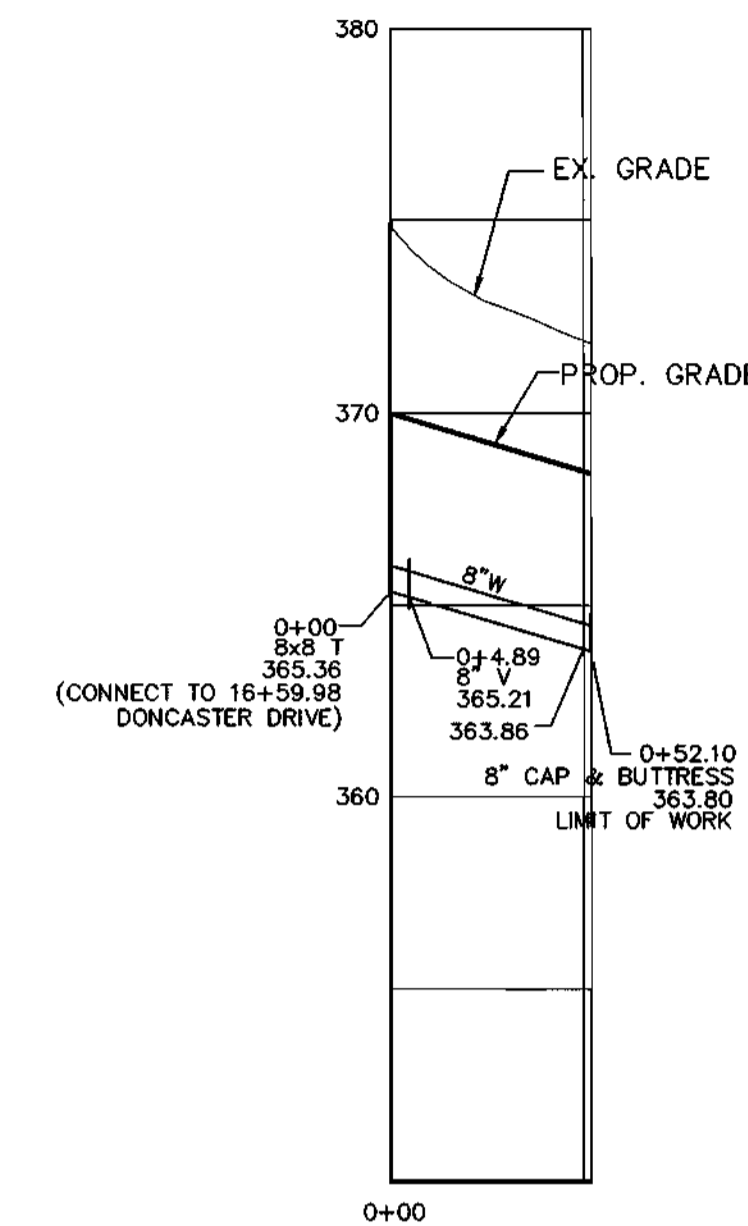
**4" WATER PROFILE  
EASEMENT FOR LOTS: 96 & 97**

SCALE: HOR. 1"=50'  
VER. 1"=5'



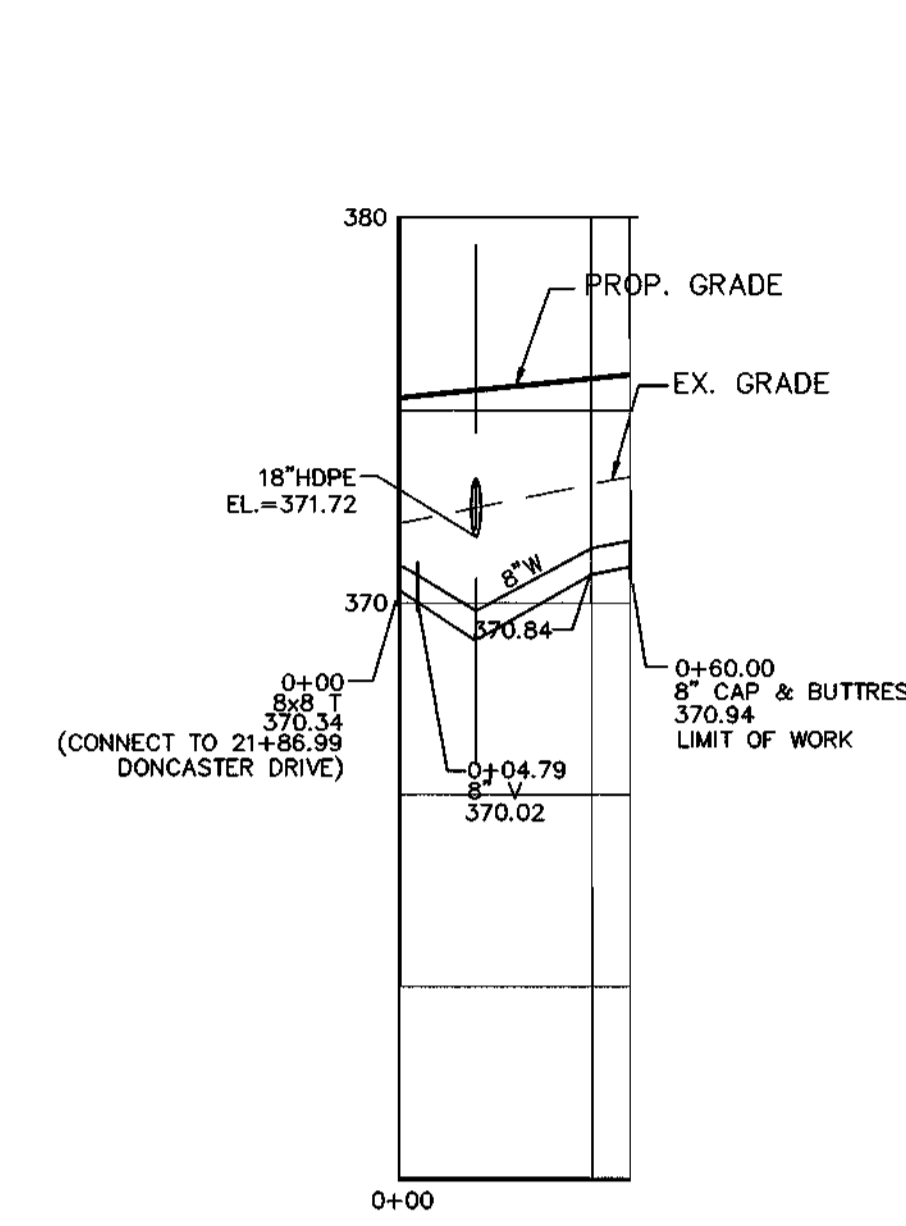
**8" WATER PROFILE  
FUTURE ROAD "A"**

SCALE: HOR. 1"=50'  
VER. 1"=5'



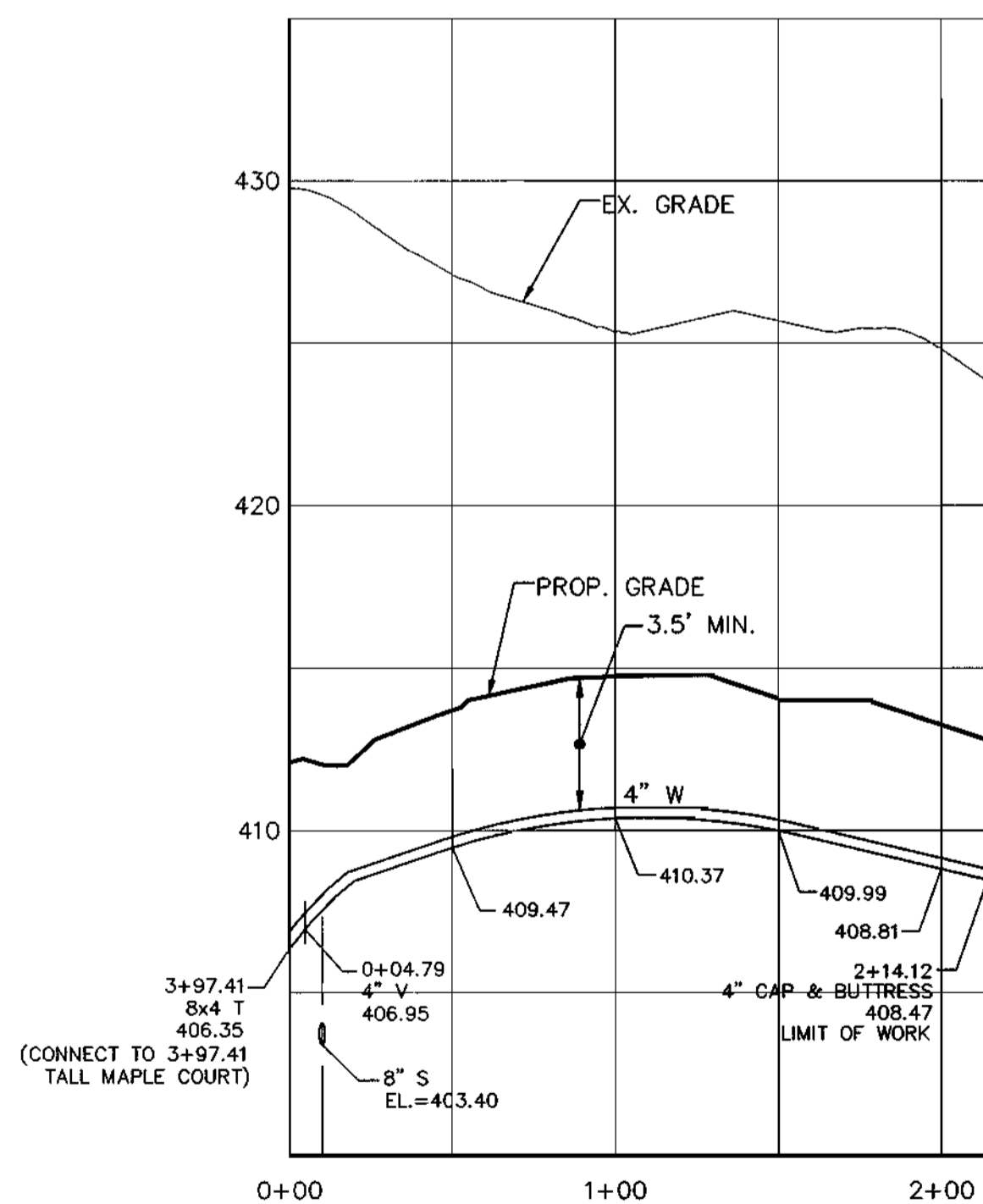
**8" WATER PROFILE  
FUTURE ROAD "C"**

SCALE: HOR. 1"=50'  
VER. 1"=5'



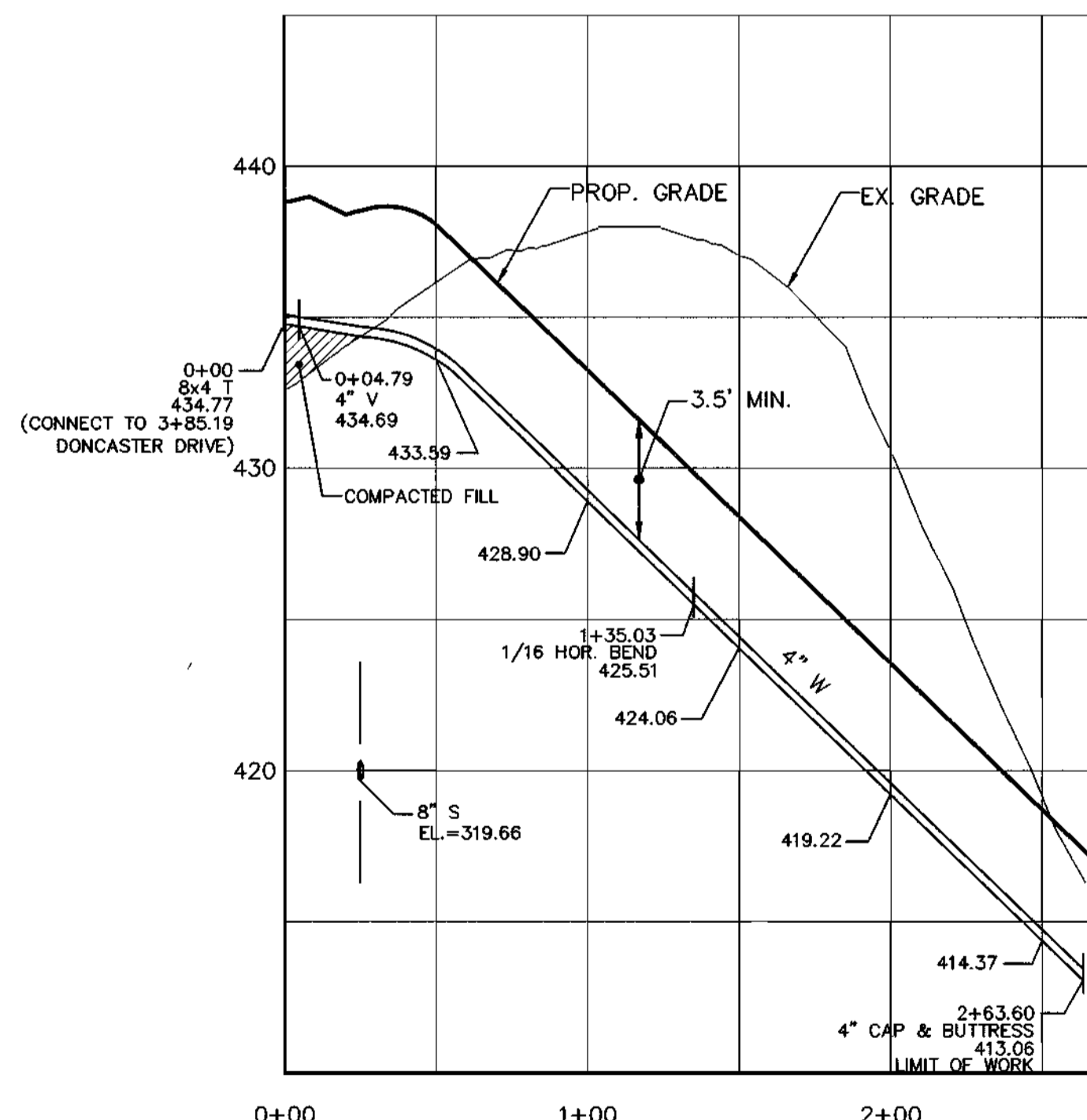
**8" WATER PROFILE  
FUTURE ROAD "D"**

SCALE: HOR. 1"=50'  
VER. 1"=5'



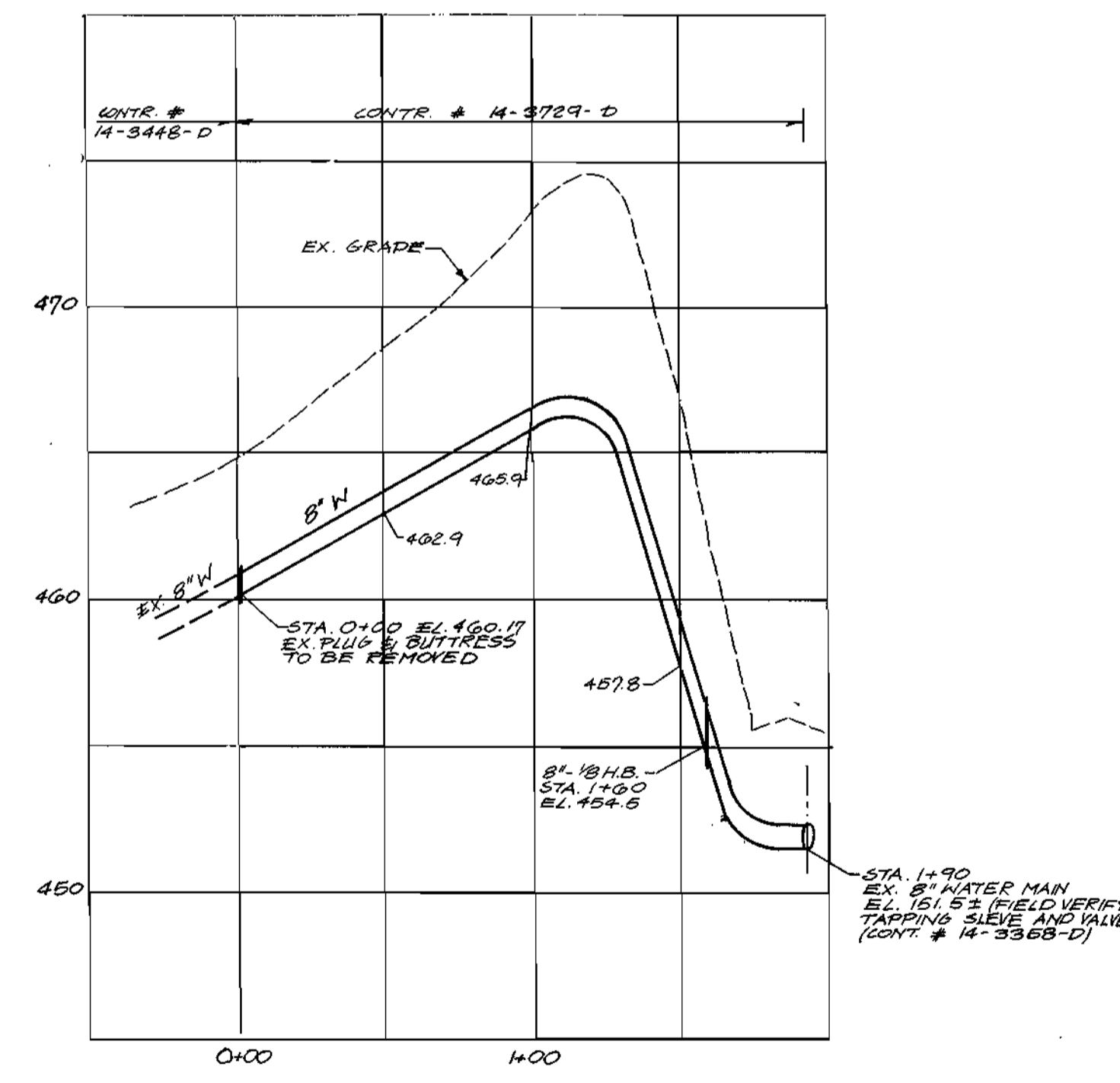
**4" WATER PROFILE  
EASEMENT FOR LOTS: 112, 113, 114 & 115**

SCALE: HOR. 1"=50'  
VER. 1"=5'



**4" WATER PROFILE  
EASEMENT FOR LOTS: 142, 143 & 144**

SCALE: HOR. 1"=50'  
VER. 1"=5'



**8" WATER PROFILE  
BETWEEN CONTR. NOS. 14-3448-D  
AND 14-3358-D**

SCALE: HOR. 1"=50'  
VER. 1"=5'

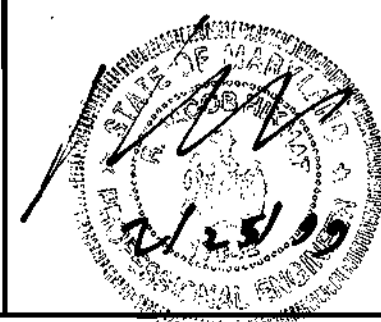
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DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND

**MILDENBERG,  
BOENDER & ASSOC., INC.**  
Engineers Planners Surveyors

5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042  
(410) 987-0296 Fax (301) 621-5521 Wash. (410) 987-0298 Fax

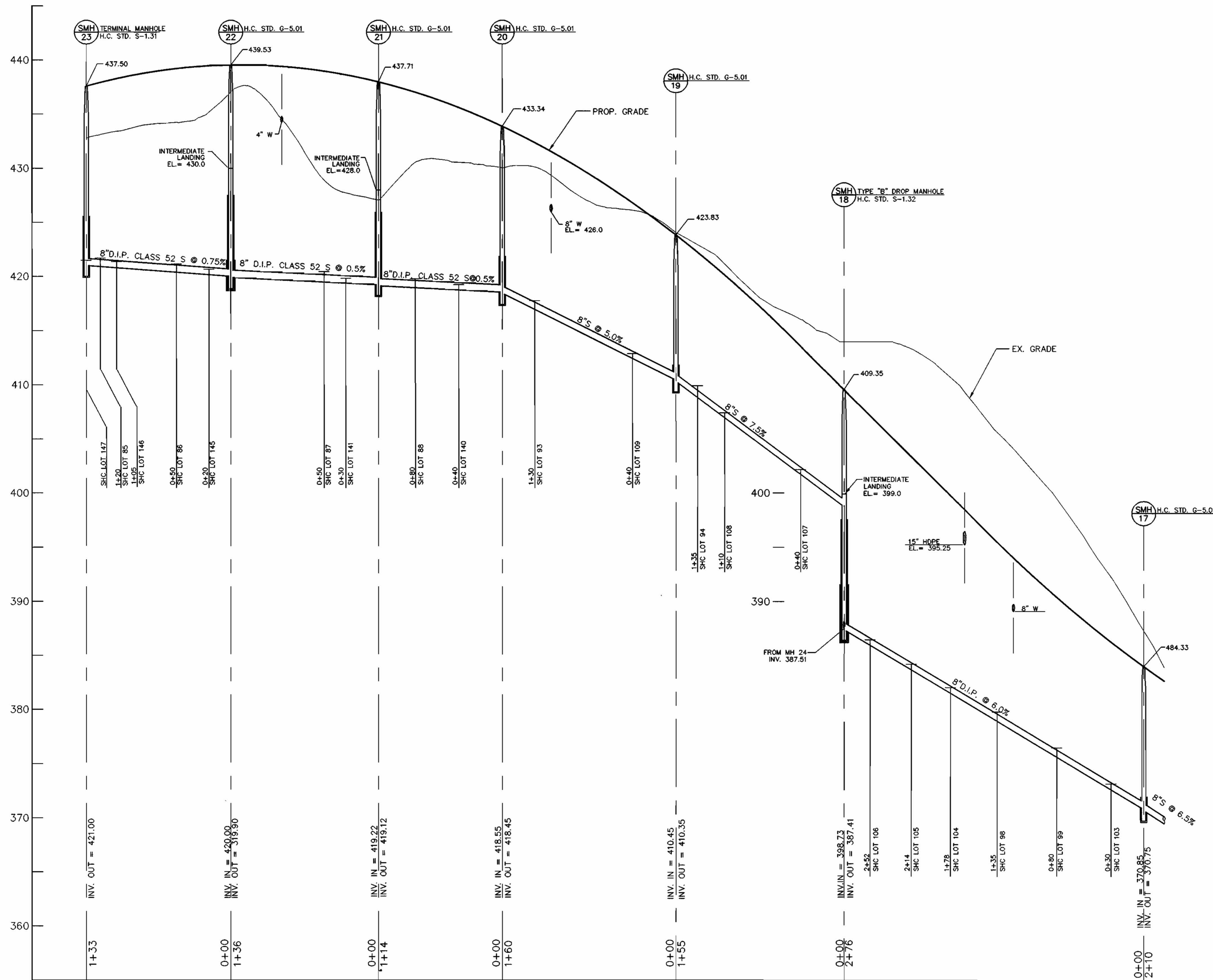


engineering	MMP				
illustration	RCJ				
approval	RJH				
project	97015				
date	FEB 1999	BY	NO.	REVISION	DATE

**WATER  
PROFILES**

**AUTUMN VIEW, SECTION 3**  
LOTS 76 - 149  
CONTRACT NO. 14-3729-D  
SECOND ELECTION DISTRICT  
HOWARD COUNTY

scale  
HOR. 1"=50'  
VER. 1"=5'



**8" SEWER PROFILES (DONCASTER DRIVE)**

SCALE: HOR - 1"=50'  
VER - 1"=5'

97015.DWG (FINAL) MKS'S SEW-PROF

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND

**MILDENBERG, BOENDER & ASSOC., INC.**  
Engineers Planners Surveyors

5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042  
(410) 997-0200 Fax (301) 621-6521 Work (410) 997-0200 Fax



engineering	MMP				
illustration	RCJ				
approval	RJH				
project	97015				
date	FEB. 1999	BY	NO.	REVISION	DATE

**SEWER PROFILES**

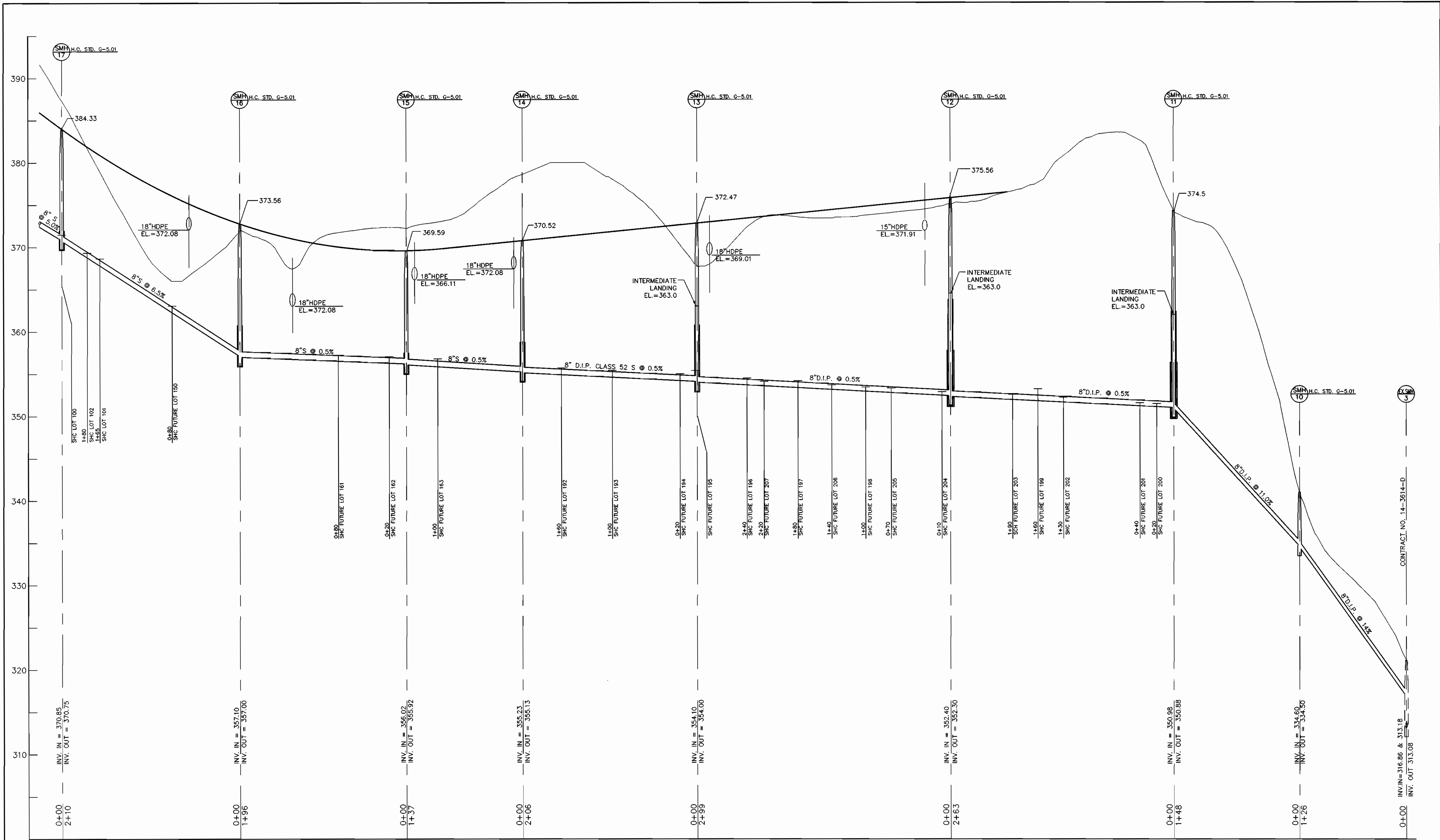
600' SCALE MAP NO. 31 BLOCK NO. 3, 4

**AUTUMN VIEW, SECTION 3**  
LOTS 76 - 149  
CONTRACT NO.: 14-3729-D  
SECOND ELECTION DISTRICT  
HOWARD COUNTY

scale  
HOR: 1"=50'  
VER: 1"=5'

Robert W. Boender 3-3-99  
CHIEF, BUREAU OF UTILITIES DATE

Michael Dammann 3/15/99  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE



**8" SEWER PROFILES (DONCASTER DRIVE)**

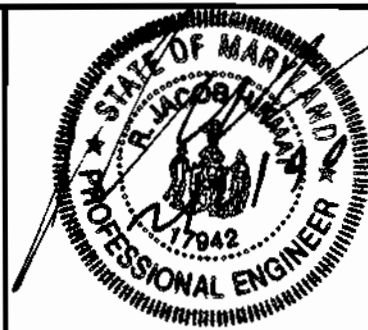
HOR - 1"=50'  
VER - 1"=5'

97015.DWG\FINAL\W&S\SEW-PROF

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
*Robert M. Benson*  
CHIEF, BUREAU OF UTILITIES  
DATE 3-3-99

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND  
*Michael J. ...*  
CHIEF, DEVELOPMENT ENGINEERING DIVISION  
DATE 3/15/99

**MILDENBERG, BOENDER & ASSOC., INC.**  
Engineers Planners Surveyors  
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042  
(410) 997-0296 Fax (301) 621-5521 Wash. (410) 997-0298 Fax



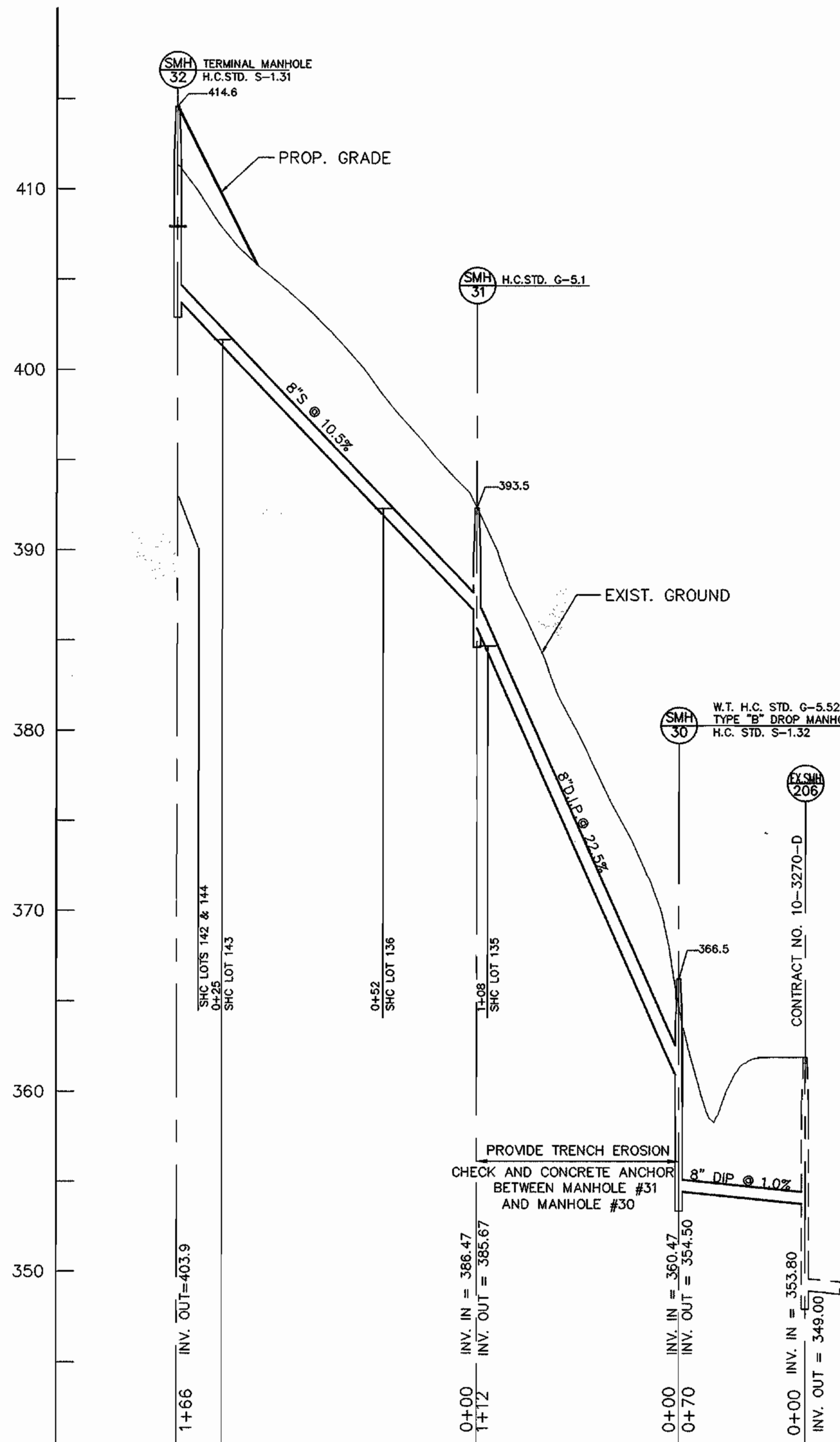
engineering	MMP				
illustration	RCJ				
approval	RJH				
project	97015				
date	FEB. 1999				
BY	NO.	REVISION	DATE	600' SCALE MAP NO. 31	BLOCK NO. 3.4

**SEWER PROFILES**

**AUTUMN VIEW, SECTION 3**  
LOTS 76 - 149  
CONTRACT NO.: 14-3729-D  
SECOND ELECTION DISTRICT  
HOWARD COUNTY

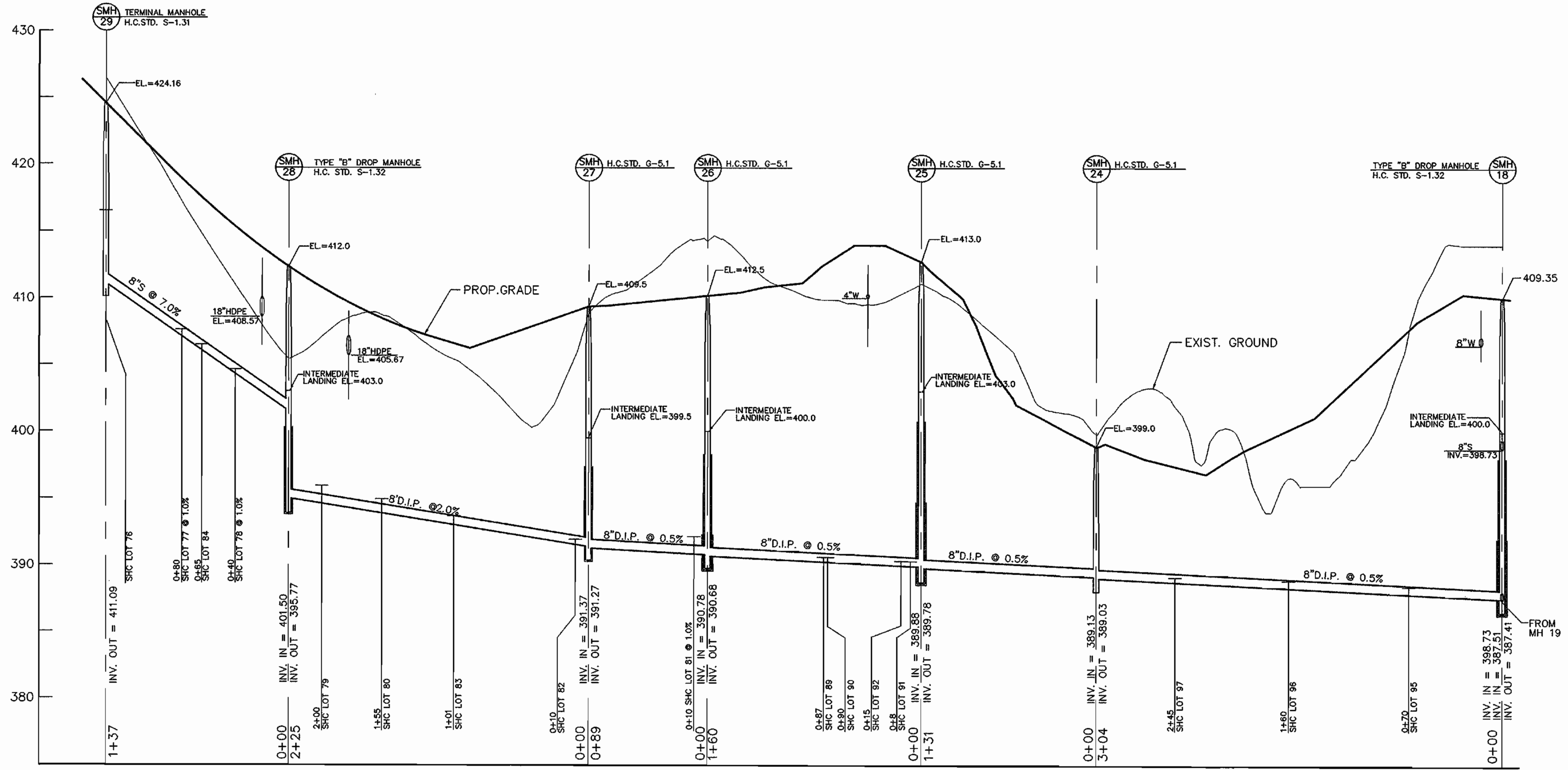
scale  
HOR: 1"=50'  
VER: 1"=5'  
**8 of 10**





**8" SEWER PROFILE**

SCALE: HOR. 1"=50'  
VER. 1"=5'



**8" SEWER PROFILE**

SCALE: HOR. 1"=50'  
VER. 1"=5'

97015.DWG\FINAL\W&S\SEW-PROF

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*Robert Berman* 3-2-99  
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND

*Michael Dammann* 2/15/99  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

**MILDENBERG, BOENDER & ASSOC., INC.**  
Engineers Planners Surveyors  
6072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042  
(410) 987-0296 Fax (301) 621-5521 Wash. (410) 987-0298 Fax



engineering	MMP				
illustration	RCJ				
approval	RJH				
project	97015				
date	FEB. 1999	BY	NO.	REVISION	DATE

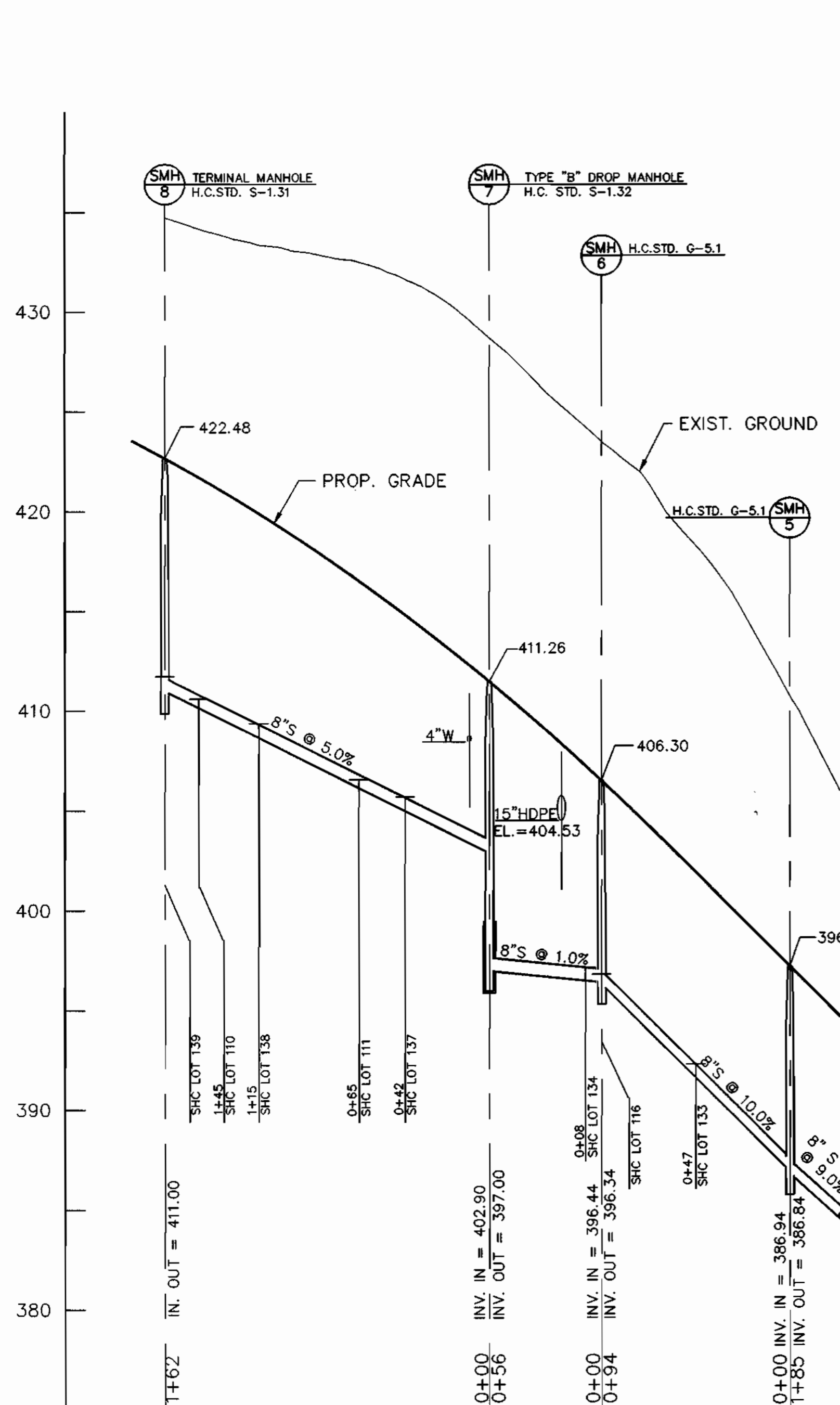
**SEWER PROFILES**

600' SCALE MAP NO. 31 BLOCK NO. 3, 4

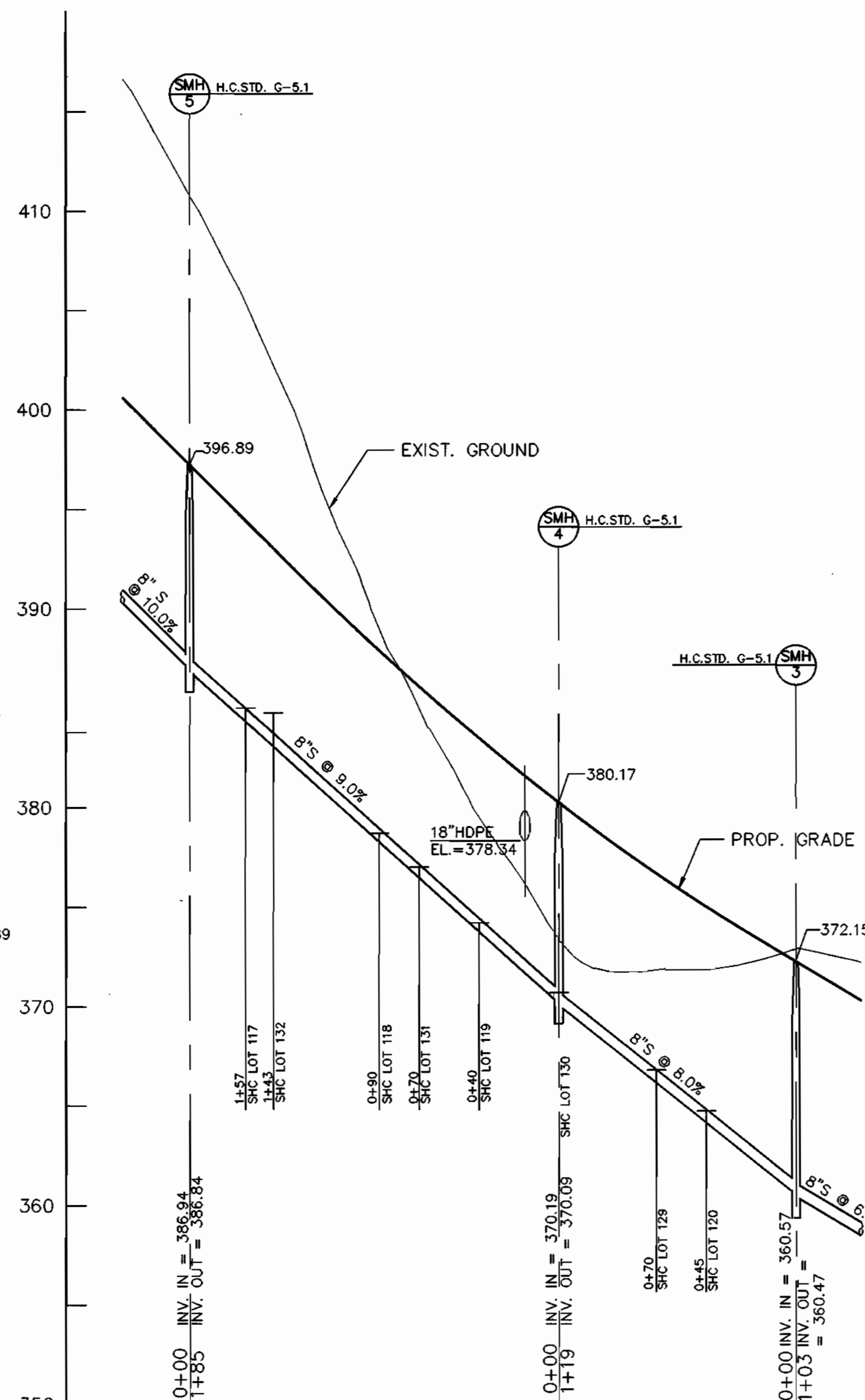
**AUTUMN VIEW, SECTION 3**  
LOTS 76 - 149  
CONTRACT NO.: 14-3729-D  
SECOND ELECTION DISTRICT  
HOWARD COUNTY

scale  
HOR. 1"=50'  
VER. 1"=5'

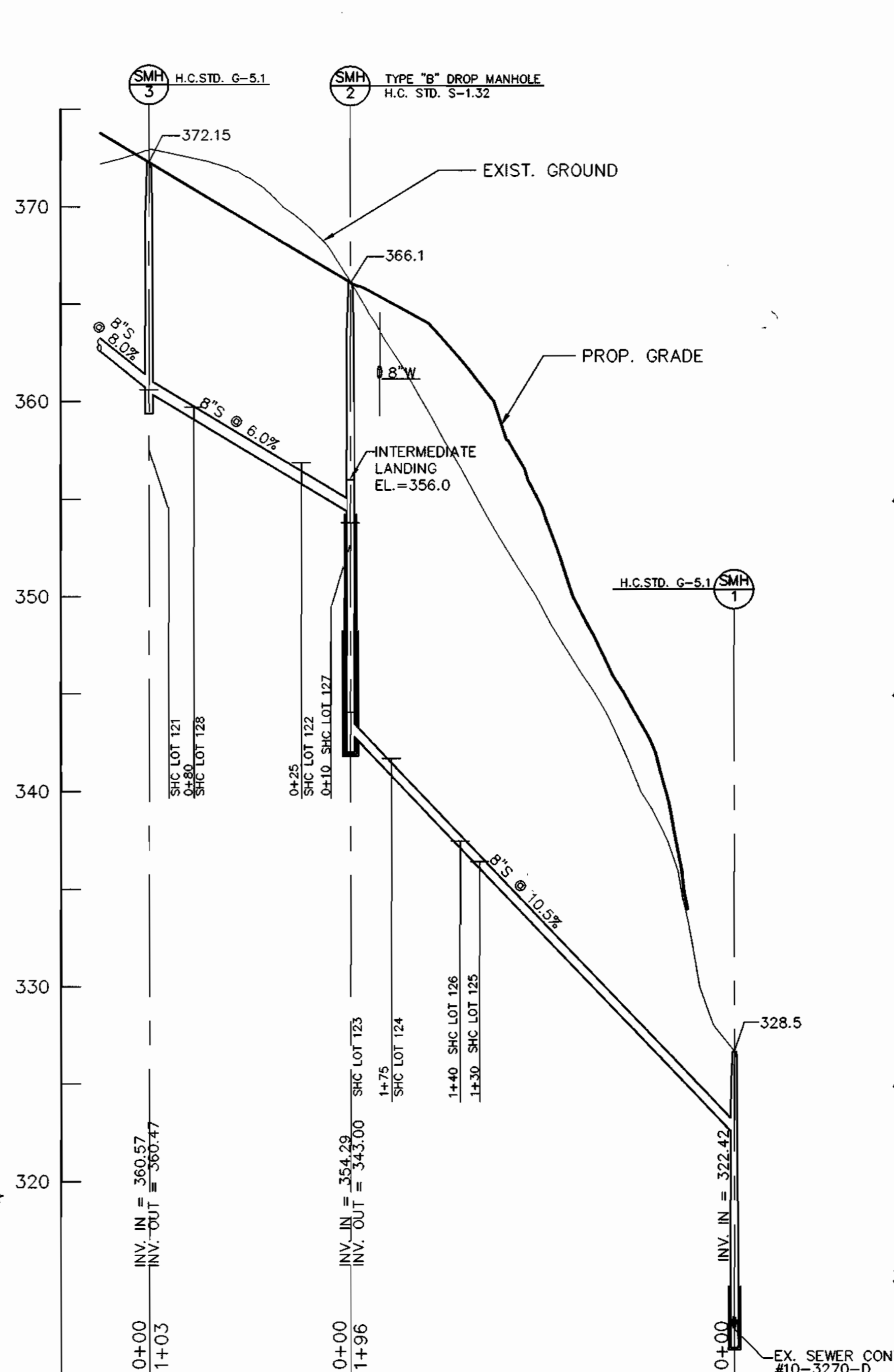
**9 OF 10**



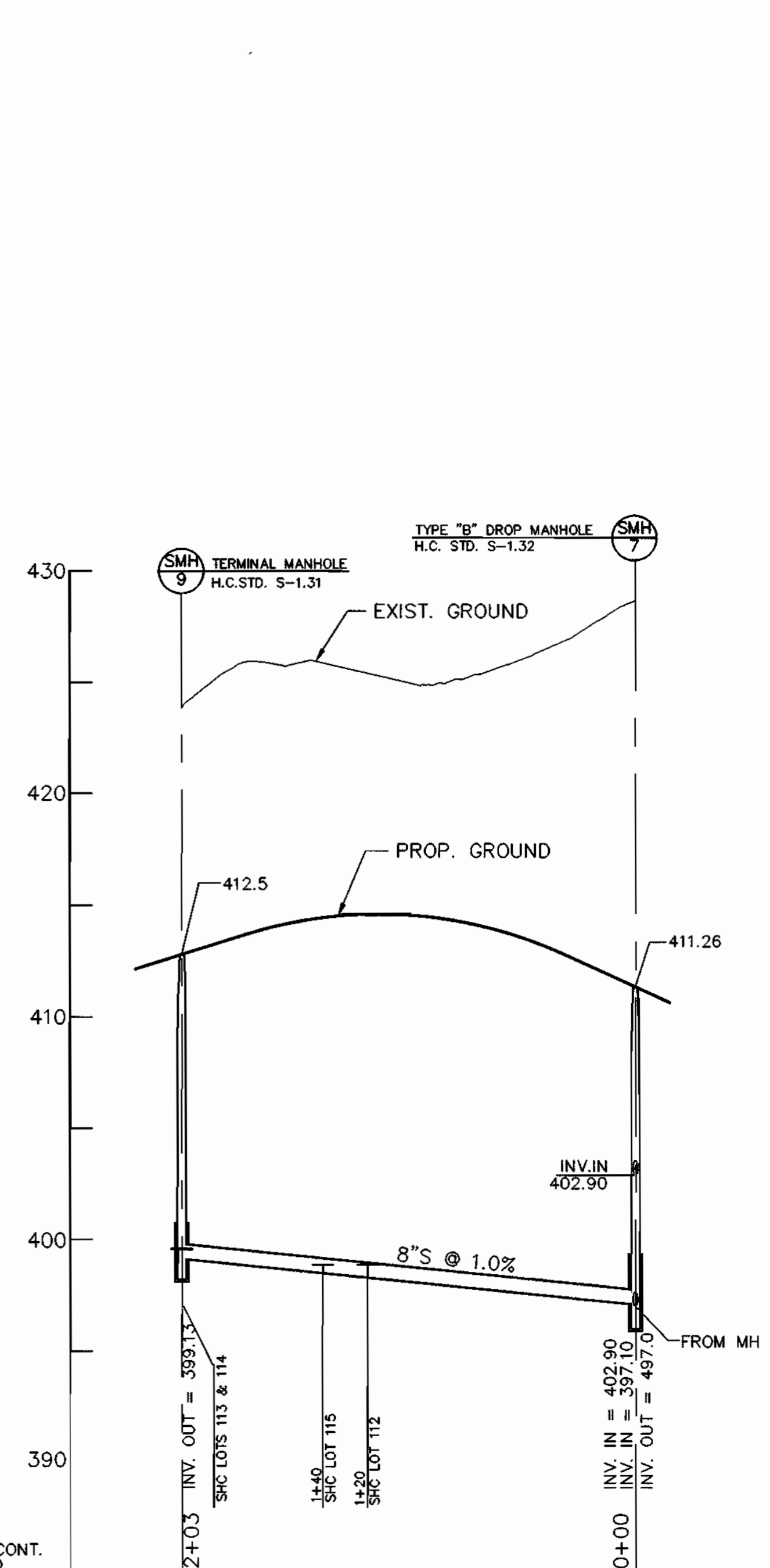
**8" SEWER PROFILE**  
SCALE: HOR. 1"=50'  
VER. 1"=5'



**8" SEWER PROFILE**  
SCALE: HOR. 1"=50'  
VER. 1"=5'



**8" SEWER PROFILE**  
SCALE: HOR. 1"=50'  
VER. 1"=5'



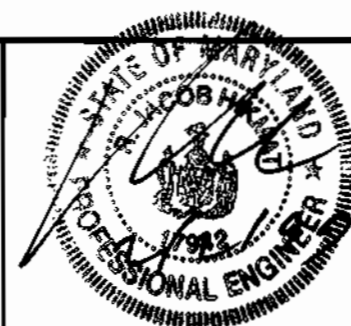
**8" SEWER PROFILE**  
SCALE: HOR. 1"=50'  
VER. 1"=5'

97015.DWG\FINAL\W&S\SEW-PROF

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
  
Robert Bauman 3-3-99  
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND  
  
[Signature] 2/15/99  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

**MILDENBERG, BOENDER & ASSOC., INC.**  
Engineers Planners Surveyors  
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042  
(410) 997-0296 Dall. (301) 621-5521 Wash. (410) 997-0288 Fax.



engineering	MMP				
illustration	RCJ				
approval	RJH				
project	97015				
date	FEB 1999	BY	NO.	REVISION	DATE

**SEWER PROFILES**

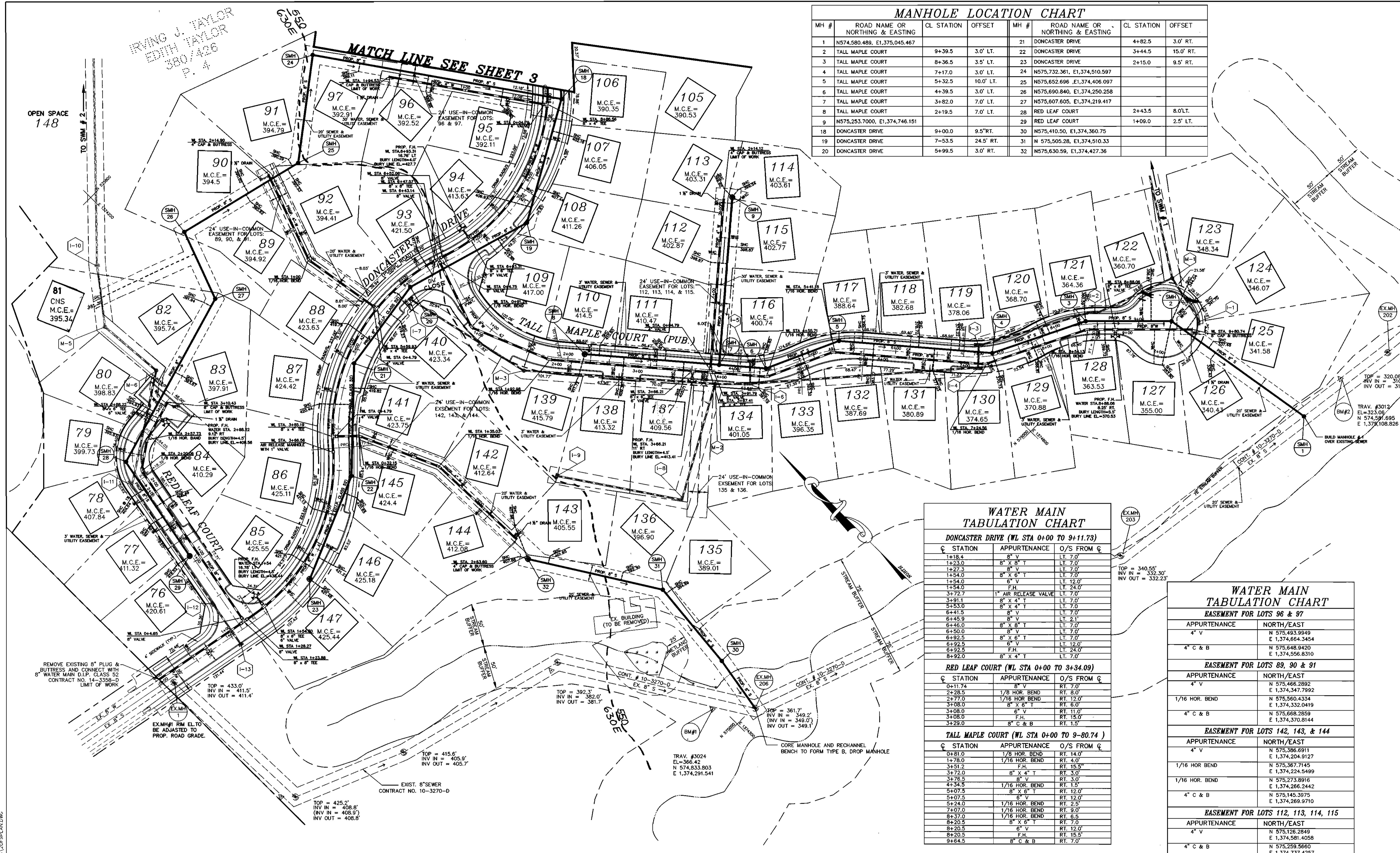
**AUTUMN VIEW, SECTION 3**  
LOTS 76 - 149  
CONTRACT NO.: 14-3729-D  
SECOND ELECTION DISTRICT  
HOWARD COUNTY

scale  
HOR. 1"=50'  
VER. 1"=5'

IRVING J. TAYLOR  
EDITH TAYLOR  
380/426  
P. 4

### MANHOLE LOCATION CHART

MH #	ROAD NAME OR NORTHING & EASTING	CL STATION	OFFSET	MH #	ROAD NAME OR NORTHING & EASTING	CL STATION	OFFSET
1	N574,580.489, E1,375,045.467			21	DONCASTER DRIVE	4+82.5	3.0' RT.
2	TALL MAPLE COURT	9+39.5	3.0' LT.	22	DONCASTER DRIVE	3+44.5	15.0' RT.
3	TALL MAPLE COURT	8+36.5	3.5' LT.	23	DONCASTER DRIVE	2+15.0	9.5' RT.
4	TALL MAPLE COURT	7+17.0	3.0' LT.	24	N575,732.361, E1,374,510.597		
5	TALL MAPLE COURT	5+32.5	10.0' LT.	25	N575,652.696, E1,374,406.097		
6	TALL MAPLE COURT	4+39.5	3.0' LT.	26	N575,690.840, E1,374,250.258		
7	TALL MAPLE COURT	3+82.0	7.0' LT.	27	N575,607.605, E1,374,219.417		
8	TALL MAPLE COURT	2+19.5	7.0' LT.	28	RED LEAF COURT	2+43.5	8.0' LT.
9	N575,253.7000, E1,374,746.151			29	RED LEAF COURT	1+09.0	2.5' LT.
18	DONCASTER DRIVE	9+00.0	9.5' RT.	30	N575,410.50, E1,374,360.75		
19	DONCASTER DRIVE	7-53.5	24.5' RT.	31	N 575,505.28, E1,374,510.33		
20	DONCASTER DRIVE	5+99.5	3.0' RT.	32	N575,630.59, E1,374,427.36		



### WATER MAIN TABULATION CHART

DONCASTER DRIVE (WL STA 0+00 TO 9+11.73)

STATION	APPURTENANCE	O/S FROM C
1+18.4	8" V	LT. 7.0'
1+23.0	8" X 8" T	LT. 7.0'
1+27.3	8" V	LT. 7.0'
1+54.0	8" X 6" T	LT. 7.0'
1+54.0	6" V	LT. 12.0'
1+54.0	F.H.	LT. 24.0'
3+72.7	1" AIR RELEASE VALVE	LT. 7.0'
3+91.1	8" X 4" T	LT. 7.0'
5+53.0	8" X 4" T	LT. 7.0'
6+41.5	8" V	LT. 7.0'
6+45.9	8" V	LT. 2.1'
6+46.0	8" X 8" T	LT. 7.0'
6+50.0	8" V	LT. 7.0'
6+92.5	8" X 6" T	LT. 7.0'
6+92.5	6" V	LT. 12.0'
6+92.5	F.H.	LT. 24.0'
8+92.0	8" X 4" T	LT. 7.0'

RED LEAF COURT (WL STA 0+00 TO 3+34.09)

STATION	APPURTENANCE	O/S FROM C
0+11.74	8" V	RT. 7.0'
2+28.5	1/8 HOR. BEND	RT. 8.0'
2+77.0	1/16 HOR. BEND	RT. 12.0'
3+08.0	8" X 6" T	RT. 6.0'
3+08.0	6" V	RT. 11.0'
3+08.0	F.H.	RT. 15.0'
3+29.0	8" C & B	RT. 1.5'

TALL MAPLE COURT (WL STA 0+00 TO 9-80.74)

STATION	APPURTENANCE	O/S FROM C
0+81.0	1/8 HOR. BEND	RT. 14.0'
1+78.0	1/16 HOR. BEND	RT. 4.0'
3+51.2	F.H.	RT. 15.5'
3+72.0	8" X 4" T	RT. 3.0'
3+76.5	8" V	RT. 3.0'
4+34.5	1/16 HOR. BEND	RT. 1.5'
5+07.5	8" X 6" T	RT. 12.0'
5+07.5	6" V	RT. 12.0'
5+24.0	1/16 HOR. BEND	RT. 2.5'
7+07.0	1/16 HOR. BEND	RT. 9.0'
8+37.0	1/16 HOR. BEND	RT. 6.5'
8+20.5	8" X 6" T	RT. 7.0'
8+20.5	6" V	RT. 12.0'
8+20.5	F.H.	RT. 15.5'
9+64.5	8" C & B	RT. 7.0'

### WATER MAIN TABULATION CHART

EASEMENT FOR LOTS 96 & 97

APPURTENANCE	NORTH/EAST
4" V	N 575,493.9949 E 1,374,664.3454
4" C & B	N 575,648.9420 E 1,374,556.8310

EASEMENT FOR LOTS 89, 90 & 91

APPURTENANCE	NORTH/EAST
4" V	N 575,466.2892 E 1,374,347.7992
1/16 HOR. BEND	N 575,560.4334 E 1,374,332.0419
4" C & B	N 575,668.2859 E 1,374,370.8144

EASEMENT FOR LOTS 142, 143, & 144

APPURTENANCE	NORTH/EAST
4" V	N 575,386.6911 E 1,374,204.9127
1/16 HOR. BEND	N 575,367.7145 E 1,374,224.5499
1/16 HOR. BEND	N 575,273.8916 E 1,374,266.2442
4" C & B	N 575,145.3975 E 1,374,269.9710

EASEMENT FOR LOTS 112, 113, 114, 115

APPURTENANCE	NORTH/EAST
4" V	N 575,126.2849 E 1,374,581.4058
4" C & B	N 575,299.5660 E 1,374,737.4257

**WATER MAIN  
TABULATION CHART**

DONCASTER DRIVE (WL STA 9+07.07 TO 24+53.21)		
STATION	APPURTENANCE	O/S FROM C
10+49.65	8" V	LT. 7.0'
10+54.0	8" X 8" T	LT. 7.0'
10+54.1	8" V	LT. 2.1'
10+58.5	8" V	LT. 7.0'
11+06.5	8" X 6" T	LT. 7.0'
11+06.5	6" V	LT. 12.0'
11+06.5	F.H.	LT. 15.0'
13+79.1	8" V	LT. 7.0'
13+79.5	8" X 8" T	LT. 7.0'
13+84.2	8" V	LT. 7.0'
16+20.5	8" X 6" T	LT. 7.0'
16+20.5	6" V	LT. 12.0'
16+20.5	F.H.	LT. 15.5'
16+61.3	8" V	LT. 7.0'
16+65.5	8" X 8" T	LT. 7.0'
16+69.9	8" V	LT. 7.0'
N 576.167.878	8" X 8" T	
E 1,375.394.729	8" C & B	
19+62.0	8" X 6" T	LT. 7.0'
19+62.0	6" V	LT. 2.0'
19+62.0	F.H.	RT. 15.0'
21+77.0	8" X 8" T	LT. 7.0'
21+82.58	6" V	LT. 7.0'
24+07.5	8" X 6" T	LT. 7.0'
24+07.5	6" V	LT. 12.0'
24+07.5	F.H.	LT. 15.5'
24+57.0	12" X 8" TAPPING SLEEVE & VALVE	LT. 7.0'

HAZEL NUT LANE (WL STA 0+00 TO STA 1+85.47)		
STATION	APPURTENANCE	O/S FROM C
1+78.9	8" C & B	RT. 7.0'

FUTURE ROAD A (WL STA 0+00 TO STA 0+53.62)		
STATION	APPURTENANCE	O/S FROM C
0+12.0	8" V	LT. 6.74'
0+61.0	8" C & B	LT. 7.0'

FUTURE ROAD C (WL STA 0+00 TO STA 0+52.10)		
STATION	APPURTENANCE	O/S FROM C
0+11.93	8" V	RT. 7.0'
0+59.5	8" C & B	RT. 7.0'

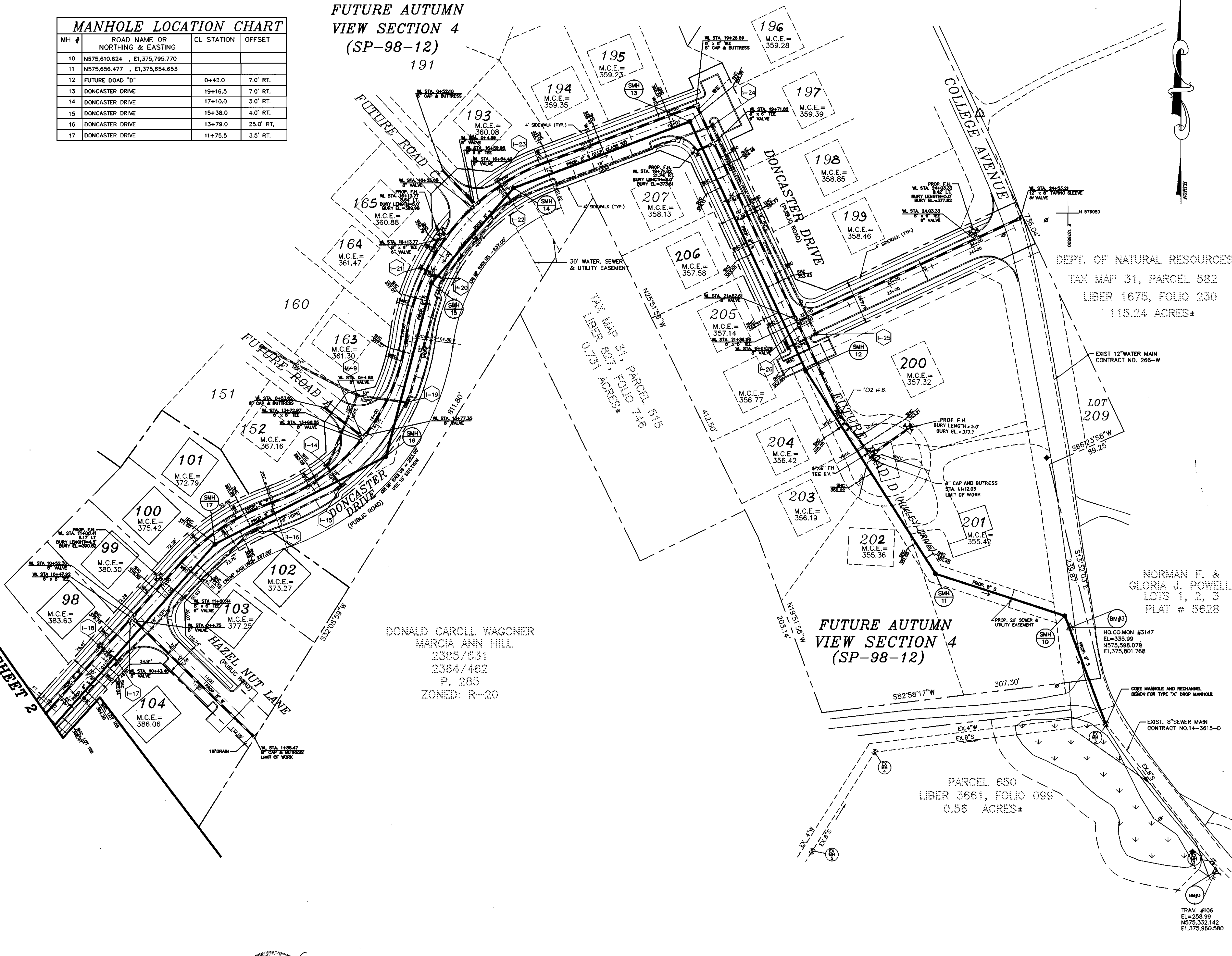
  

FUTURE ROAD D (WL STA 0+00 TO STA 0+60)		
STATION	APPURTENANCE	O/S FROM C
0+04.8	8" V	LT. 7.0'
0+55.5	8" C & B	LT. 7.0'

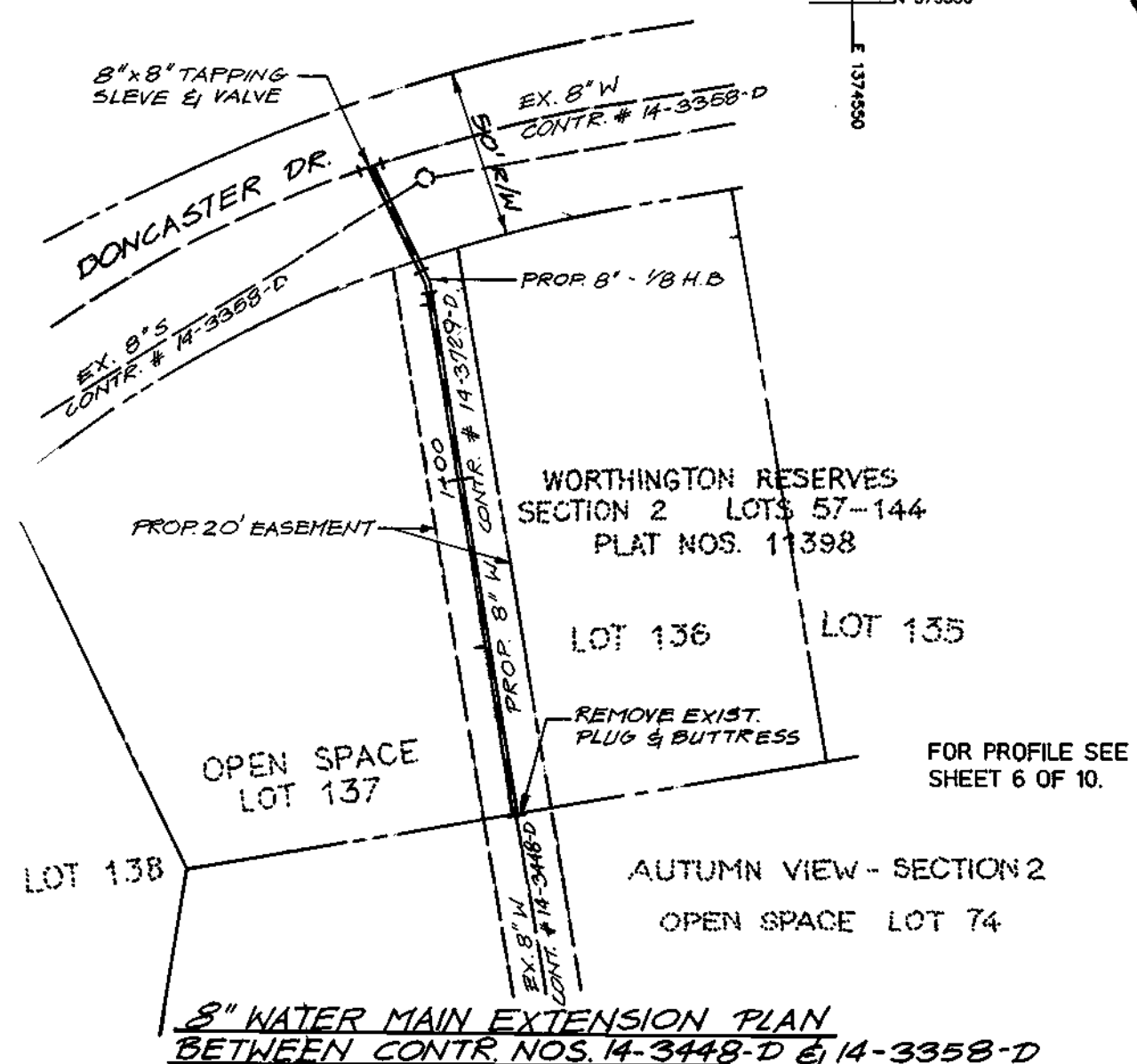
**MANHOLE LOCATION CHART**

MH #	ROAD NAME OR NORTHING & EASTING	CL STATION	OFFSET
10	N575,610.624 , E1,375,795.770		
11	N575,656.477 , E1,375,654.653		
12	FUTURE ROAD "D"	0+42.0	7.0' RT.
13	DONCASTER DRIVE	19+16.5	7.0' RT.
14	DONCASTER DRIVE	17+10.0	3.0' RT.
15	DONCASTER DRIVE	15+38.0	4.0' RT.
16	DONCASTER DRIVE	13+79.0	25.0' RT.
17	DONCASTER DRIVE	11+75.5	3.5' RT.

**FUTURE AUTUMN  
VIEW SECTION 4  
(SP-98-12)**



**MATCH LINE SEE SHEET 2**



DONALD CAROLL WAGONER  
MARCIA ANN HILL  
2385/531  
2364/462  
P. 285  
ZONED: R-20

**FUTURE AUTUMN  
VIEW SECTION 4  
(SP-98-12)**

DEPT. OF NATURAL RESOURCES  
TAX MAP 31, PARCEL 582  
LIBER 1675, FOLIO 230  
115.24 ACRES±

NORMAN F. &  
GLORIA J. POWELL  
LOTS 1, 2, 3  
PLAT # 5628

PARCEL 650  
LIBER 3661, FOLIO 099  
0.56 ACRES±

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND

*Robert M. Bruner* 3-3-99  
CHIEF, BUREAU OF UTILITIES DATE

*John P. ...* 3/5/99  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

**MILDENBERG,  
BOENDER & ASSOC., INC.**  
Engineers Planners Surveyors  
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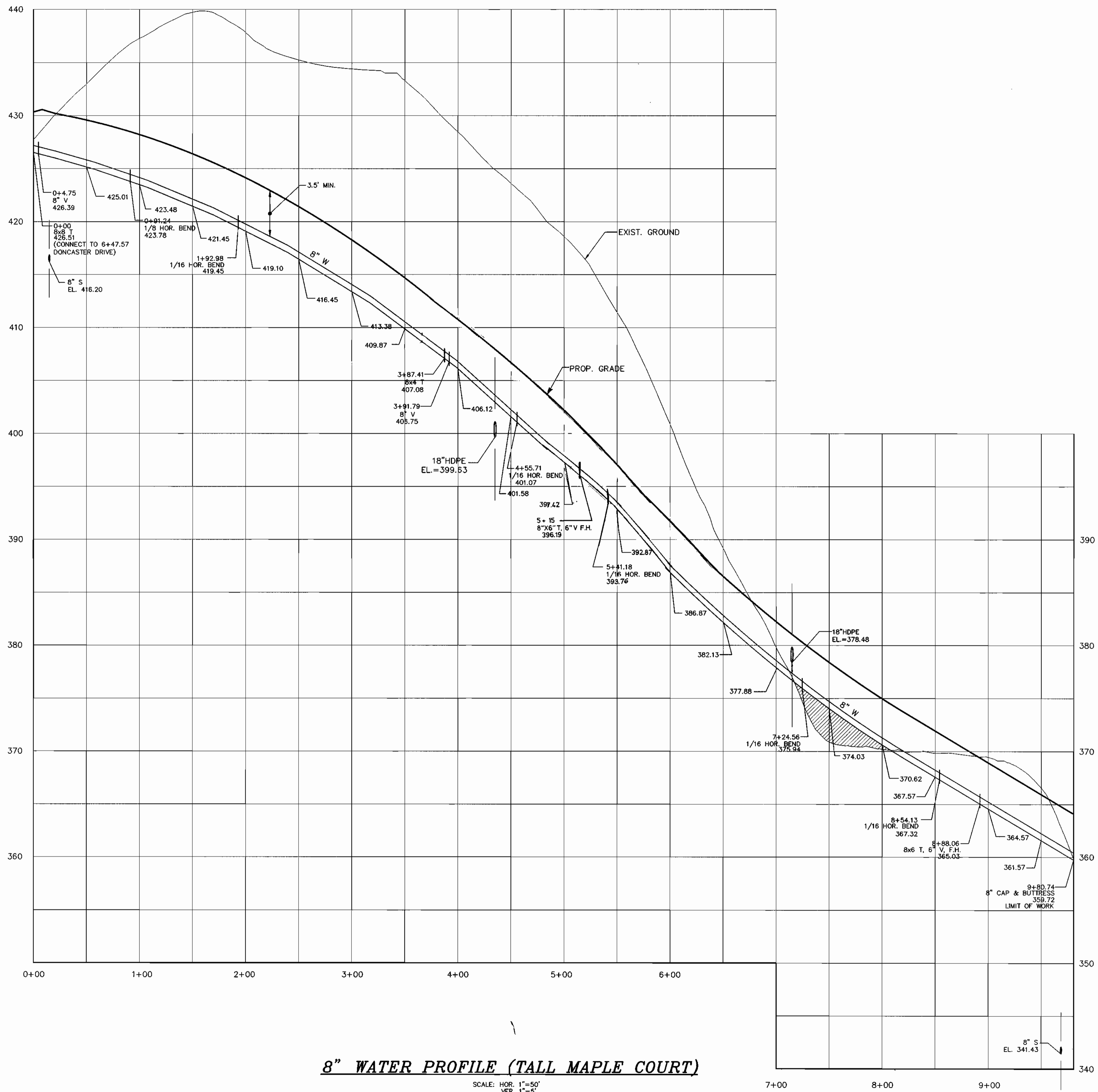
engineering	MMP		
illustration	RJ		
approval	RJH		
project	97015	MBA 1	EXTEND THE WATER LINE AT HUXLEY DR. CORRECT SEC. 4 LOT 141
date	FEB. 1999	BY NO.	REVISION

**WATER AND SEWER  
PLAN**

600' SCALE MAP NO. 31 BLOCK NO. 3, 4

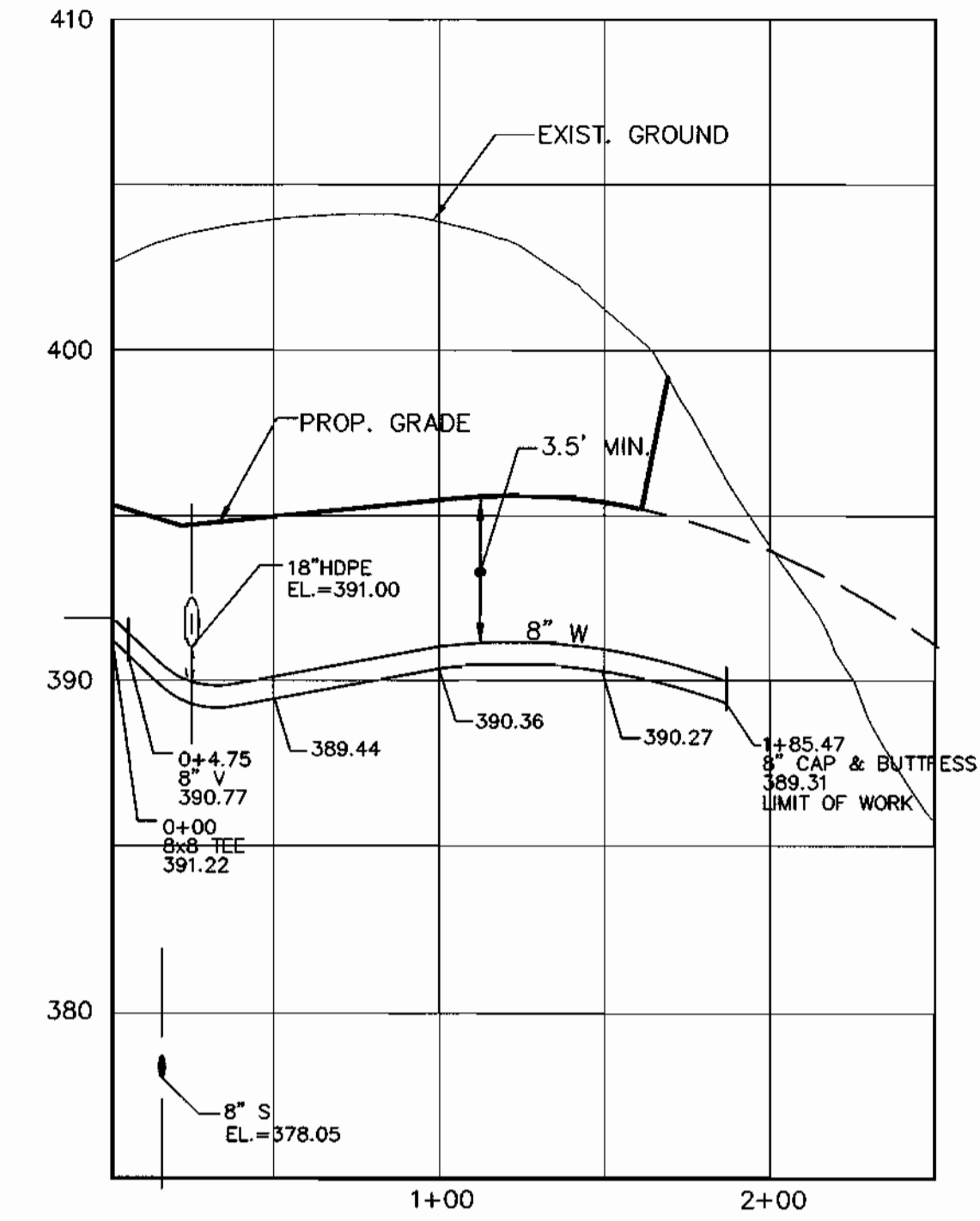
**AUTUMN VIEW, SECTION 3**  
LOTS 76 - 149  
CONTRACT NO.: 14-3729-D  
SECOND ELECTION DISTRICT  
HOWARD COUNTY

scale  
1" = 50'  
3 of 10



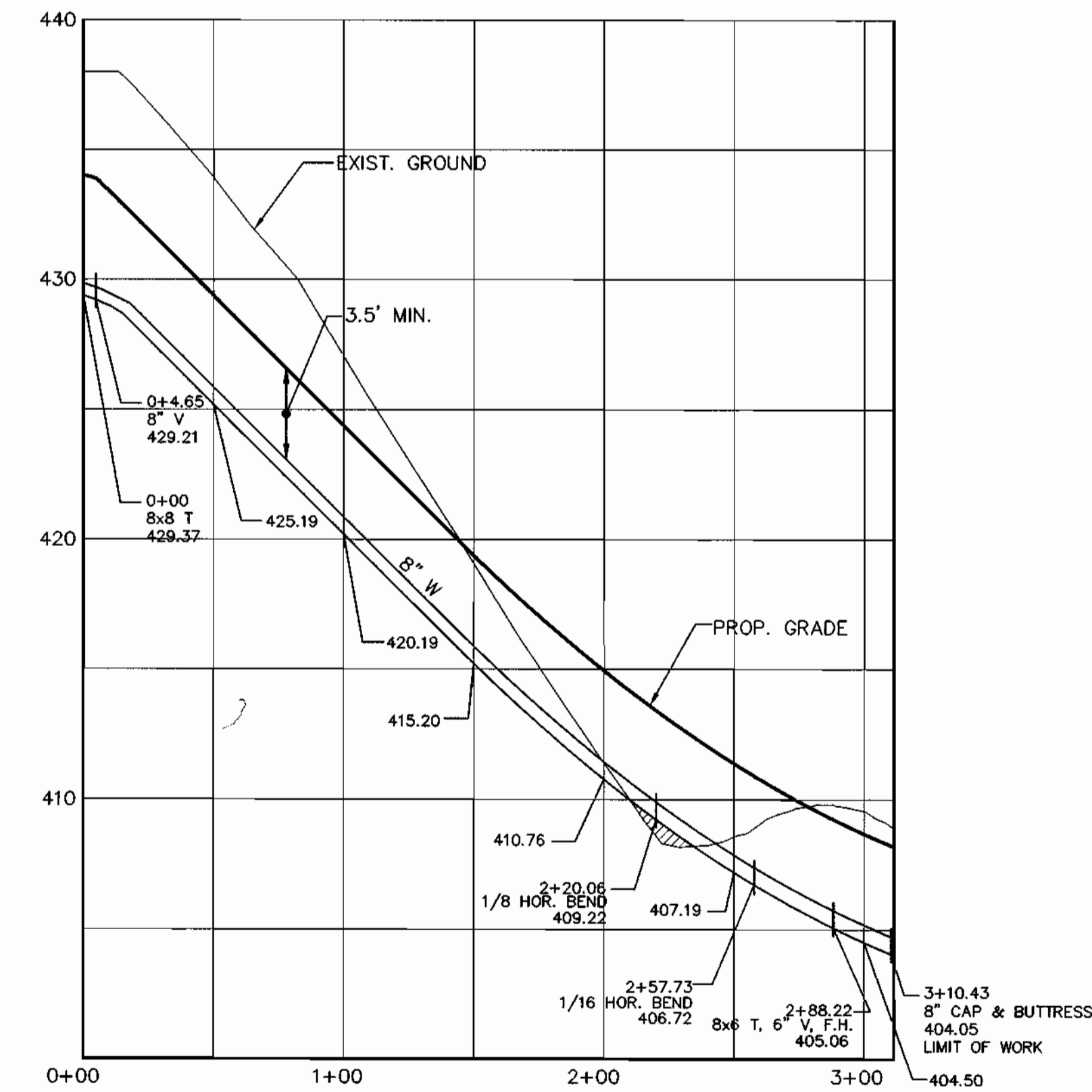
**8" WATER PROFILE (TALL MAPLE COURT)**

SCALE: HOR. 1"=50'  
VER. 1"=5'



**8" WATER PROFILE (HAZEL NUT LANE)**

SCALE: HOR. 1"=50'  
VER. 1"=5'



**8" WATER PROFILE (RED LEAF COURT)**

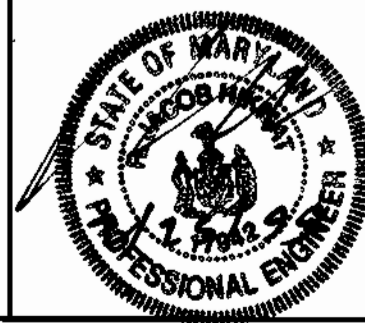
SCALE: HOR. 1"=50'  
VER. 1"=5'

97015 (DWG) FINAL (W&S) SUP 9/14/1999

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND

**MILDENBERG,  
BOENDER & ASSOC., INC.**  
Engineers Planners Surveyors

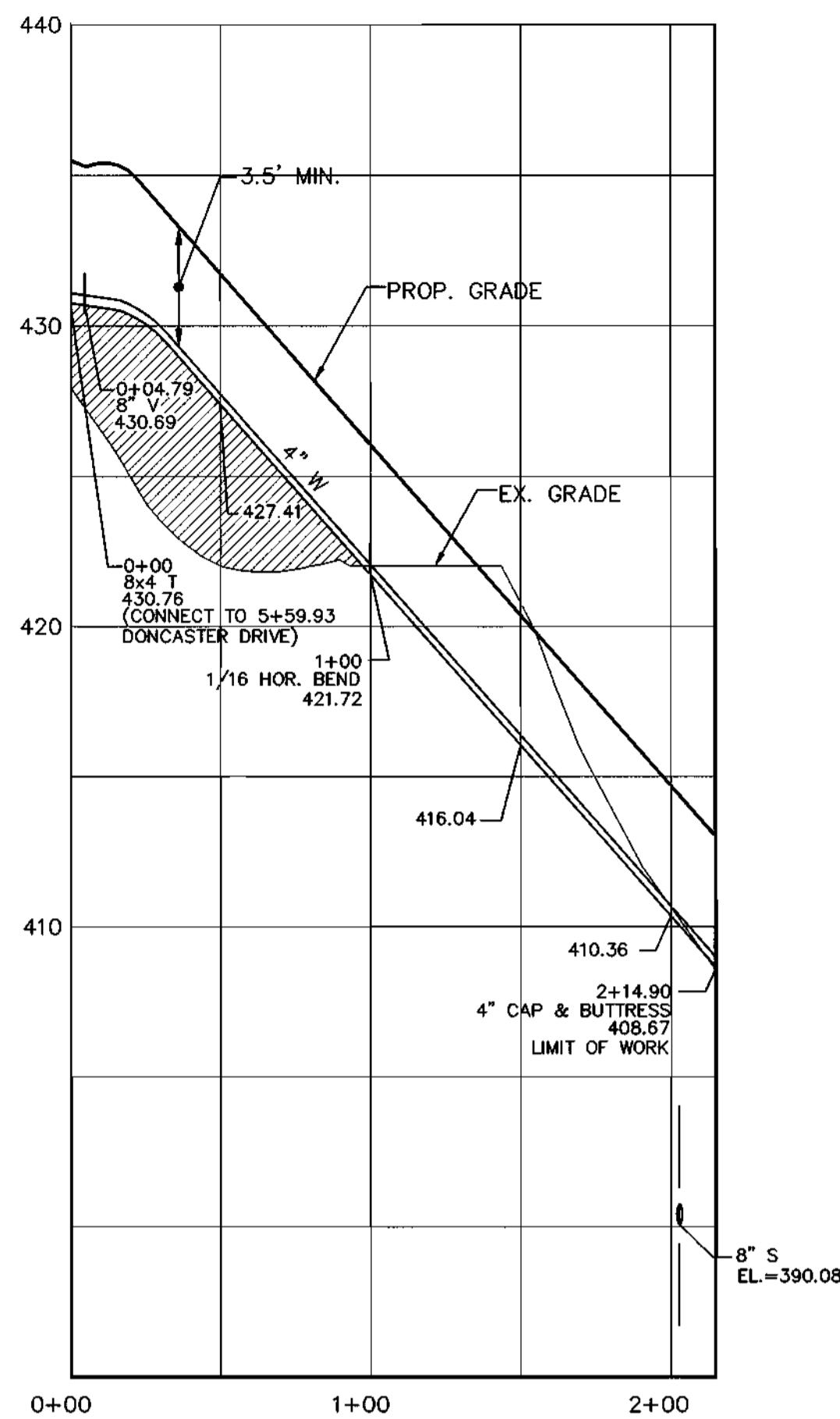


engineering	MMP				
illustration	RCJ				
approval	RJH				
project	97015	M.P.	1	RELOCATE F.H. CORRECTED PROP. GRADE	7/6/00
date	FEB. 1999	BY	NO.	REVISION	DATE

**WATER  
PROFILES**

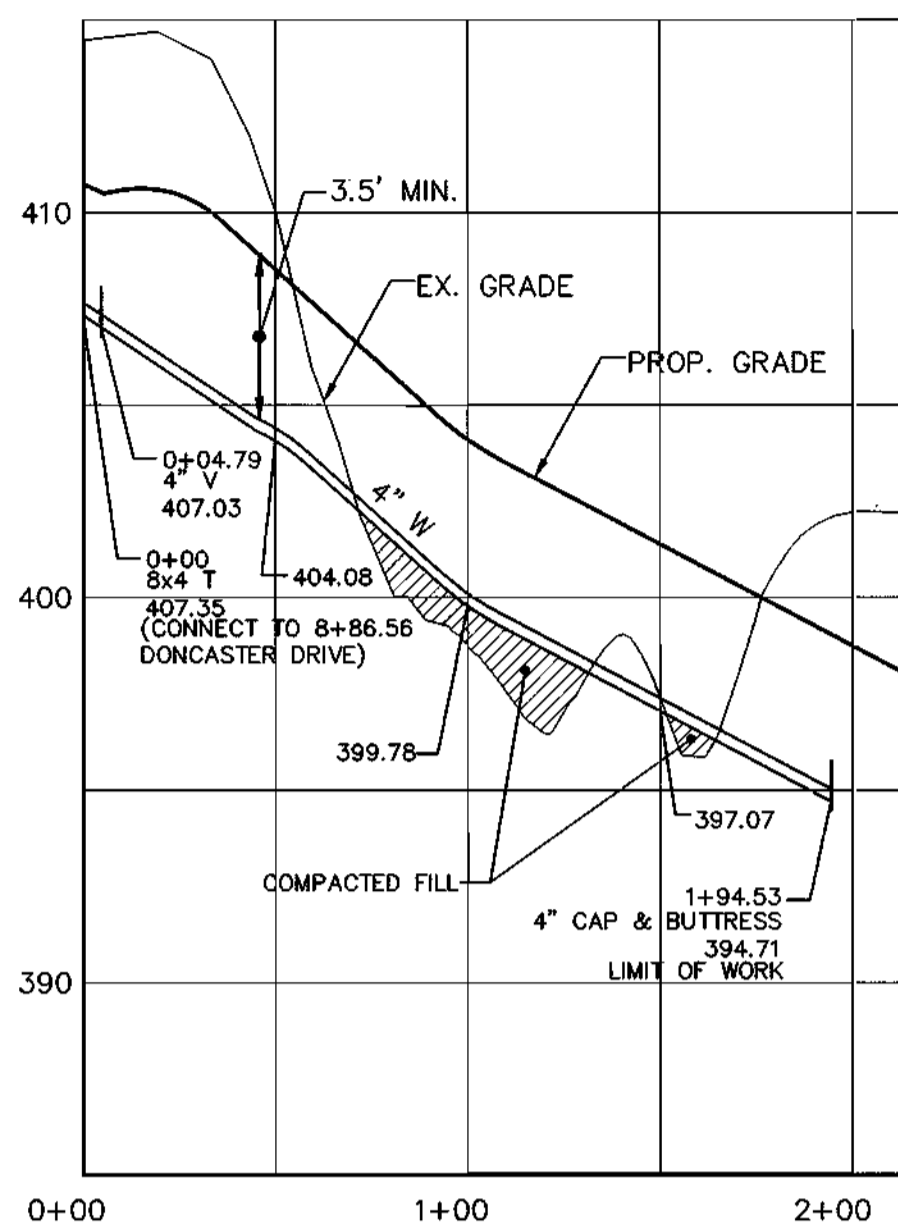
**AUTUMN VIEW, SECTION 3**  
LOTS 76 - 149  
CONTRACT NO. 14-3729-D  
SECOND ELECTION DISTRICT  
HOWARD COUNTY

scale  
HOR. 1"=50'  
VER. 1"=5'



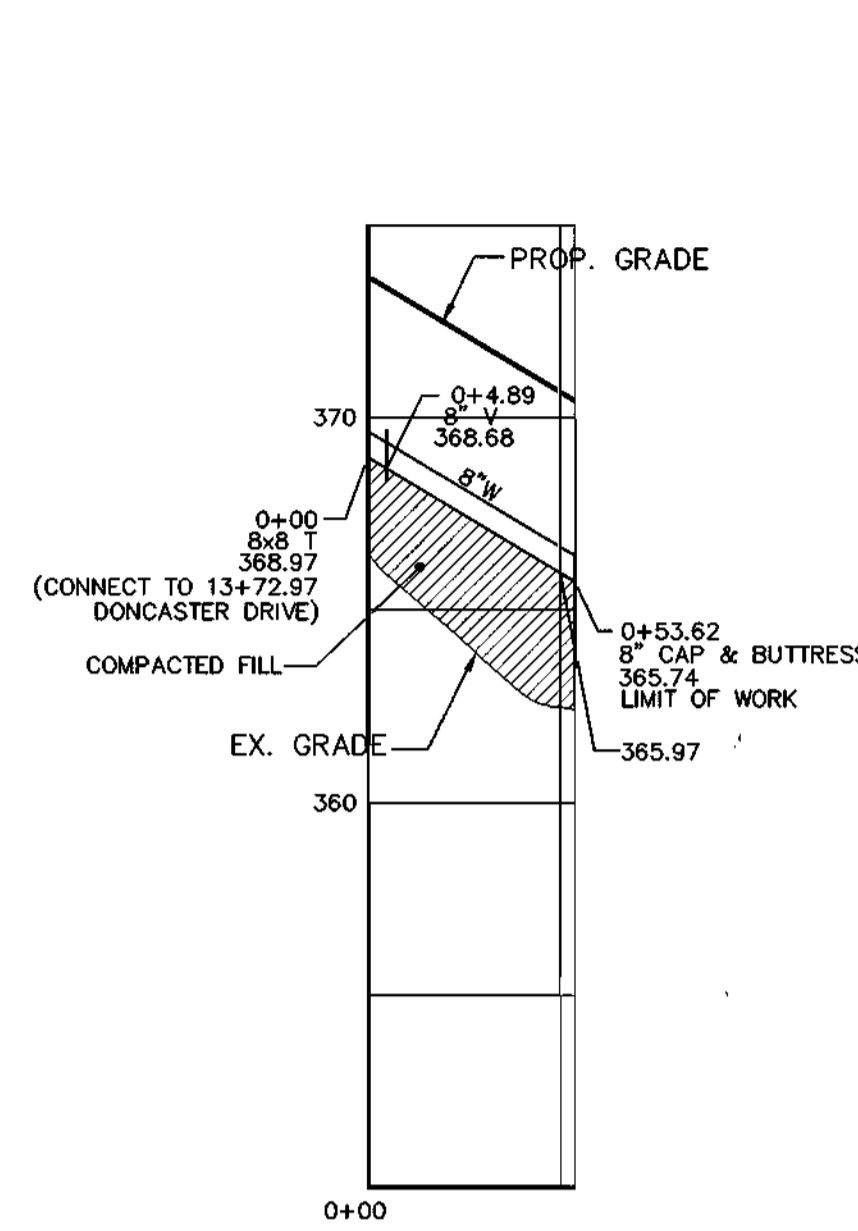
**4" WATER PROFILE  
EASEMENT FOR LOTS: 89, 90 & 91**

SCALE: HOR. 1"=50'  
VER. 1"=5'



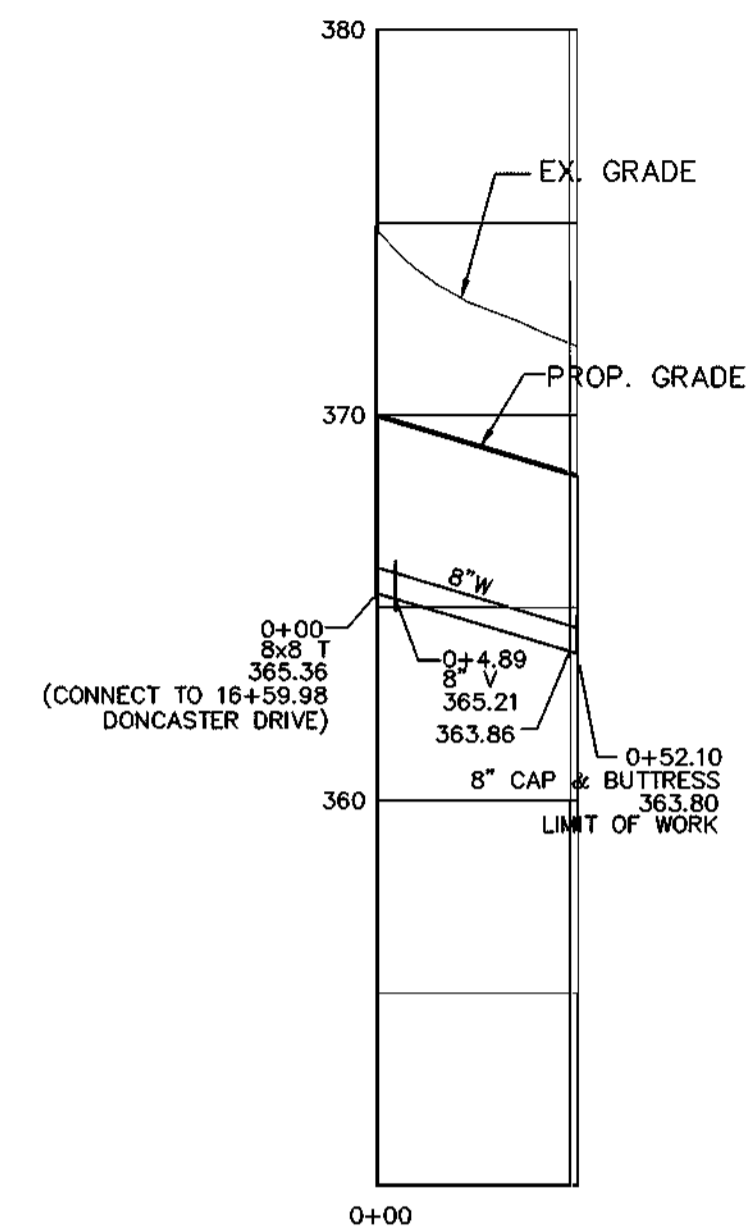
**4" WATER PROFILE  
EASEMENT FOR LOTS: 96 & 97**

SCALE: HOR. 1"=50'  
VER. 1"=5'



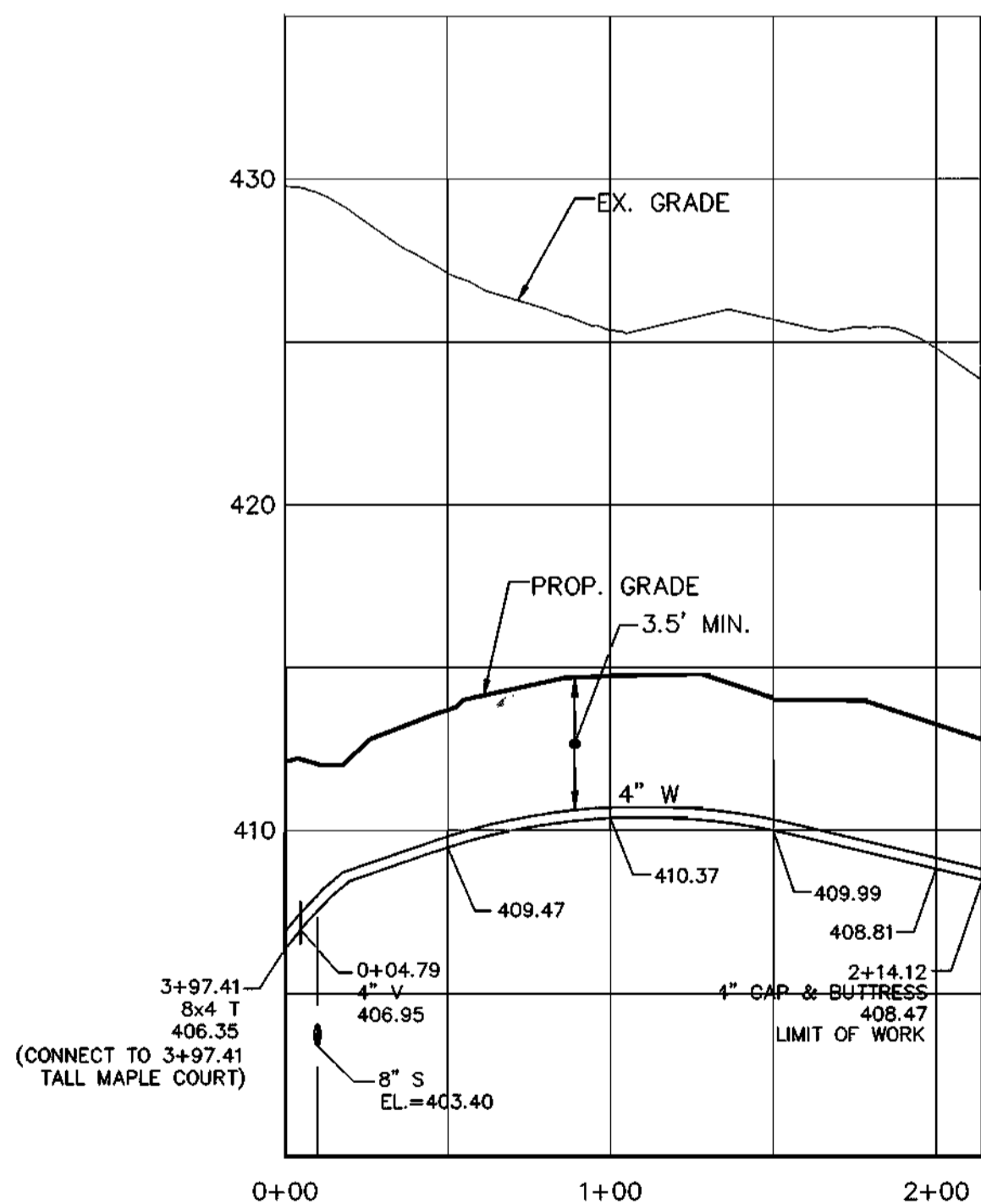
**8" WATER PROFILE  
FUTURE ROAD "A"**

SCALE: HOR. 1"=50'  
VER. 1"=5'



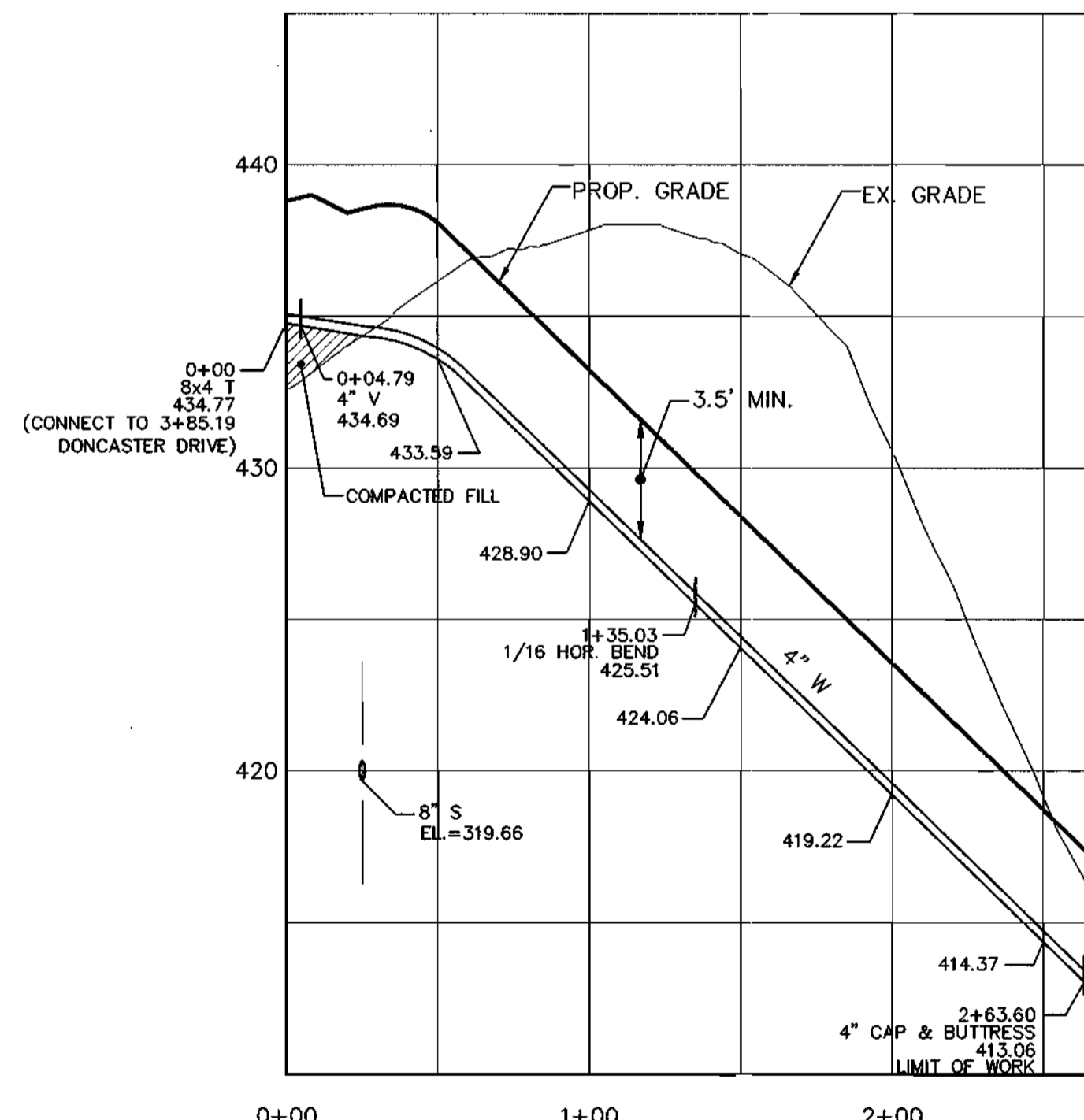
**8" WATER PROFILE  
FUTURE ROAD "C"**

SCALE: HOR. 1"=50'  
VER. 1"=5'



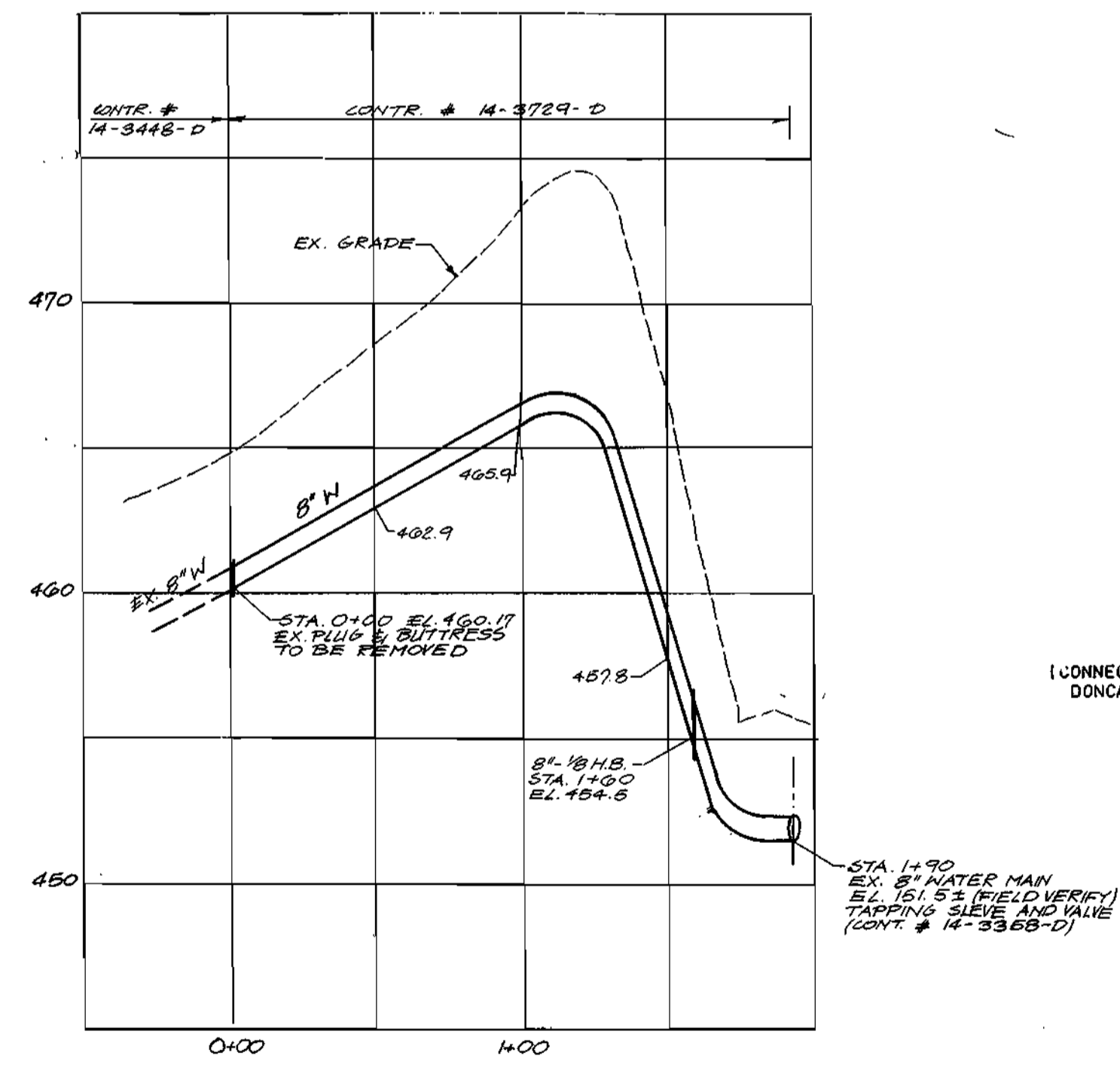
**4" WATER PROFILE  
EASEMENT FOR LOTS: 112, 113, 114 & 115**

SCALE: HOR. 1"=50'  
VER. 1"=5'



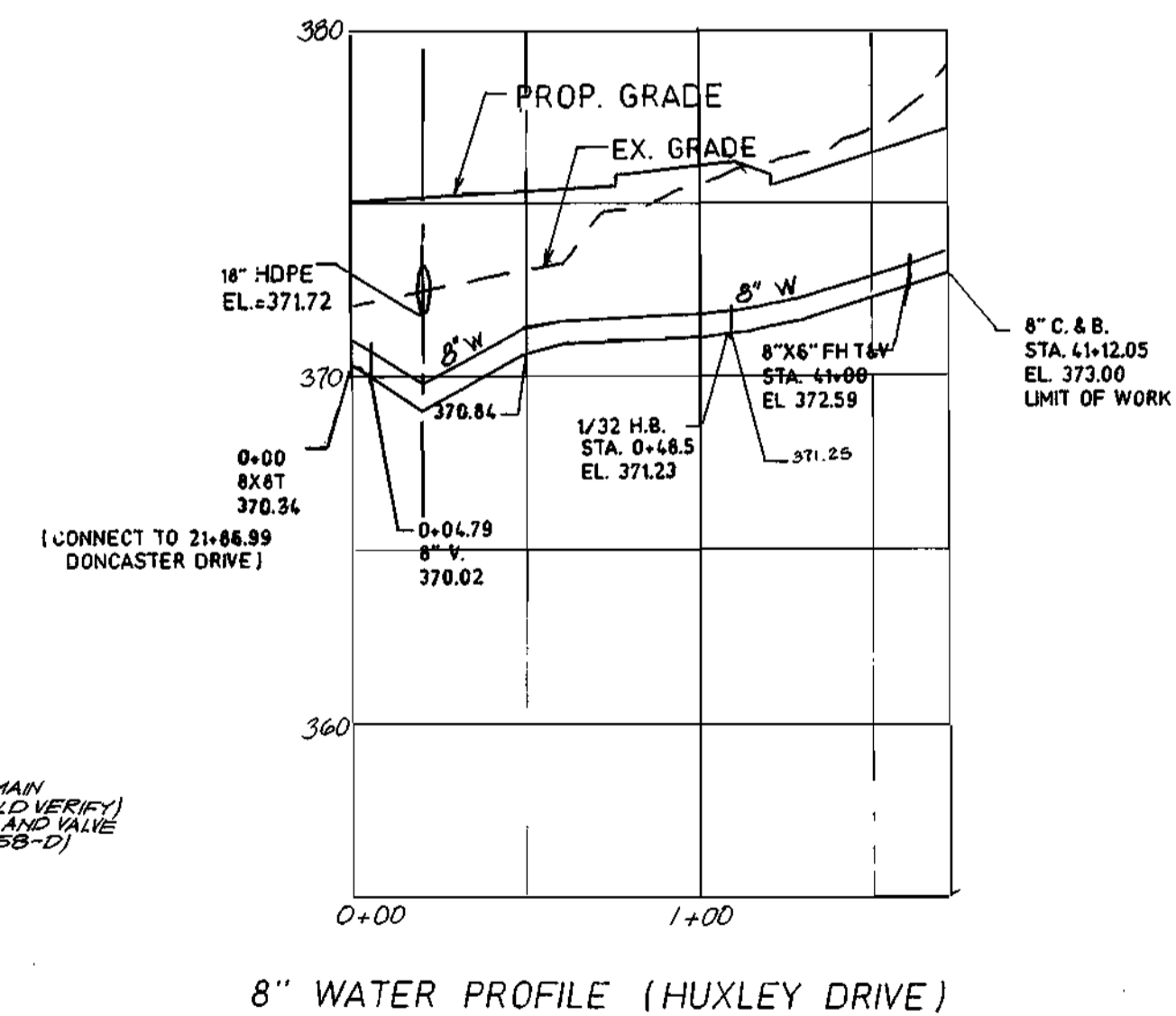
**4" WATER PROFILE  
EASEMENT FOR LOTS: 142, 143 & 144**

SCALE: HOR. 1"=50'  
VER. 1"=5'



**8" WATER PROFILE  
BETWEEN CONTR. NOS. 14-3448-D  
AND 14-3358-D**

SCALE: HOR. 1"=50'  
VER. 1"=5'



**8" WATER PROFILE (HUXLEY DRIVE)**

SCALE: HOR. 1"=50'  
VER. 1"=5'

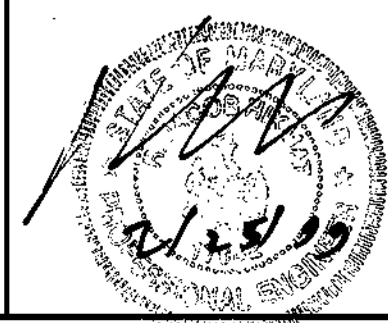
97015 (VMS) FINAL VMS & SDF 9 WATERPROFILES

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND

**MILDENBERG,  
BOENDER & ASSOC., INC.**  
Engineers Planners Surveyors

5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042  
(410) 997-0296 Bal. (301) 621-5521 Wash. (410) 997-0296 Fax

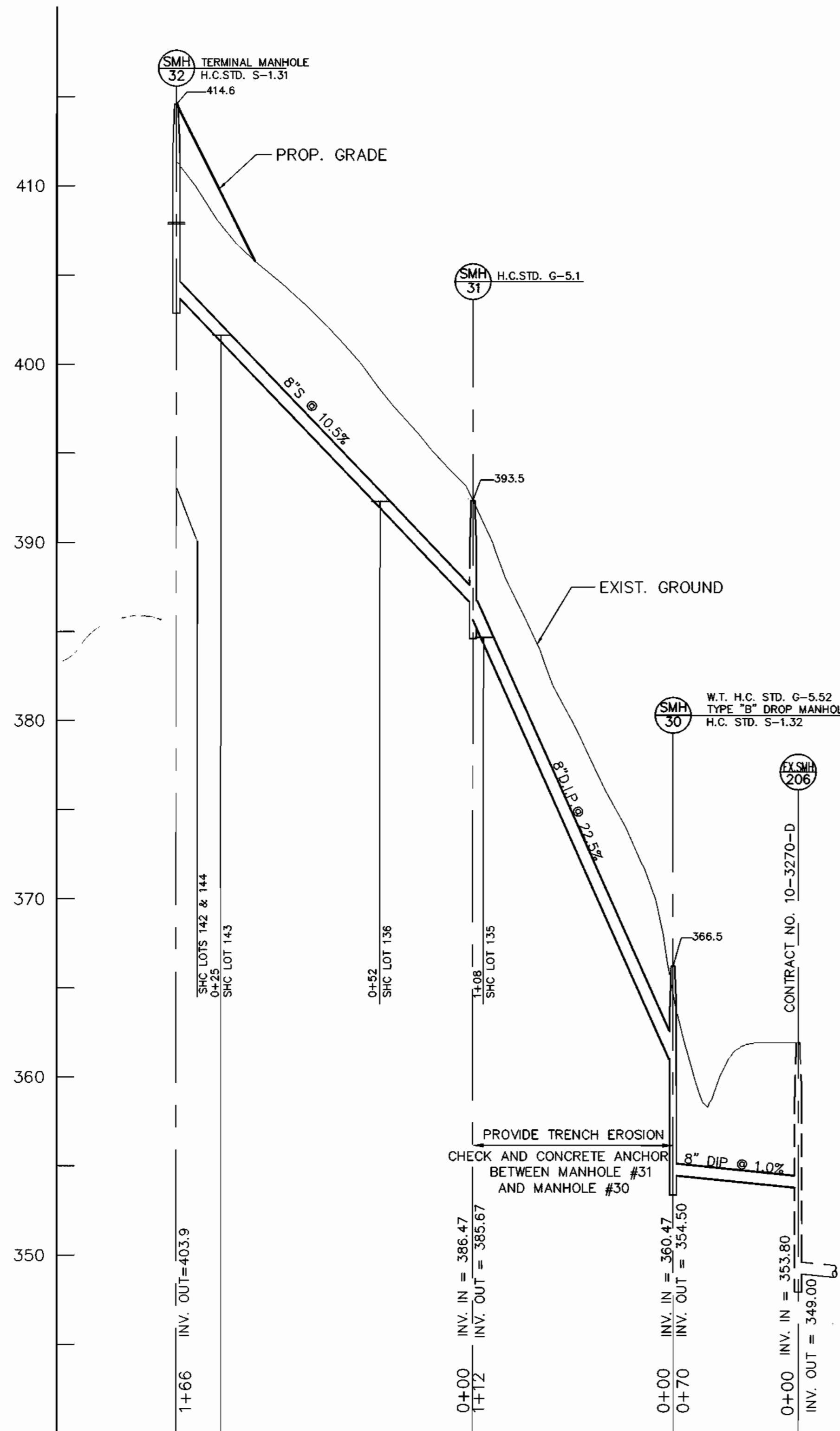


engineering	MMP				
illustration	RCJ				
approval	RJH				
project	97015	MBA	I	REVISE THE WATER PROFILE FOR FUTURE ROAD "D" (HUXLEY DRIVE)	2/1/02
date	FEB. 1999	BY	NO.	REVISION	DATE

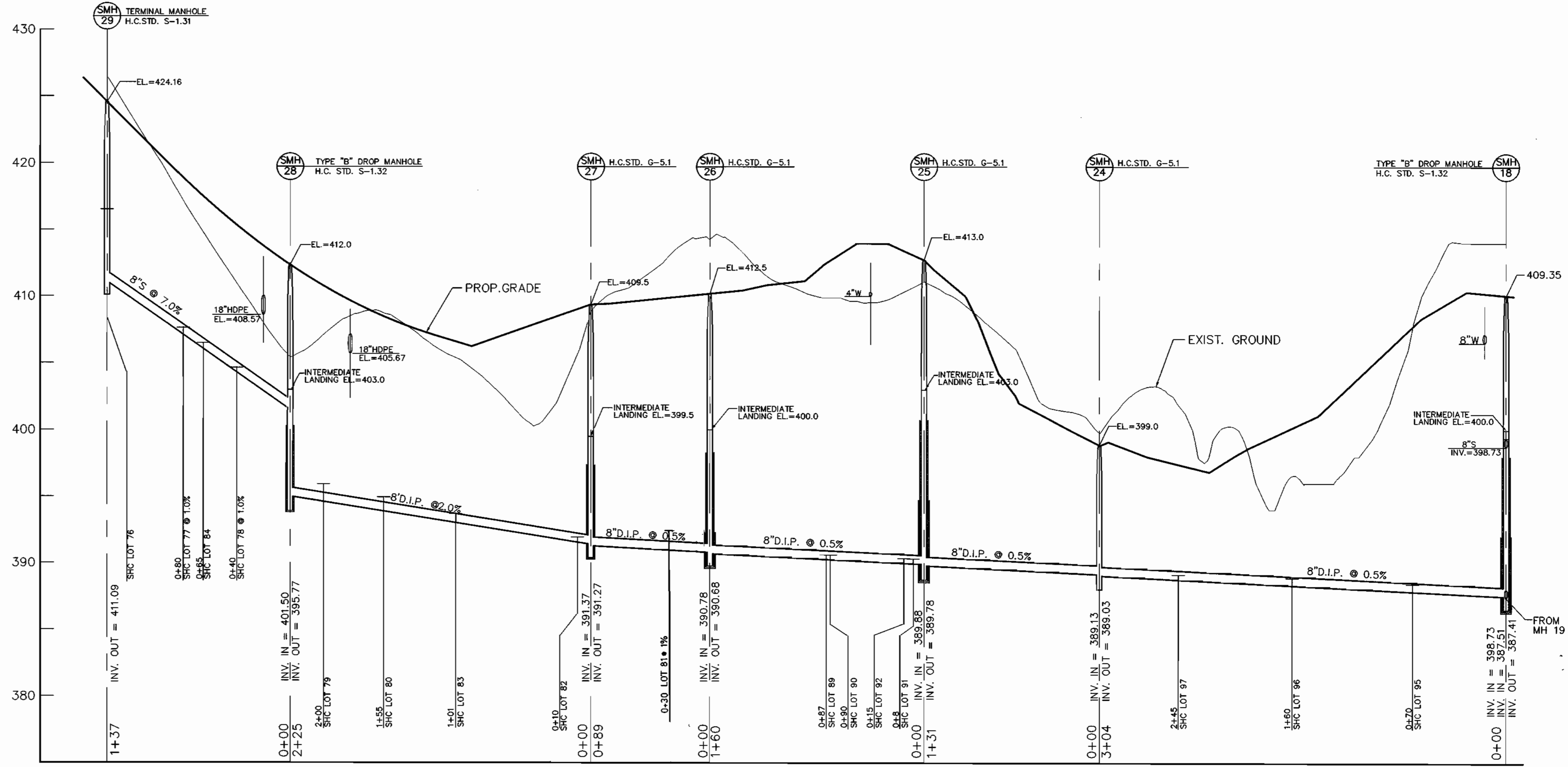
**WATER  
PROFILES**

**AUTUMN VIEW, SECTION 3**  
LOTS 76 - 149  
CONTRACT NO.: 14-3729-D  
SECOND ELECTION DISTRICT  
HOWARD COUNTY

scale  
HOR. 1"=50'  
VER. 1"=5'



**8" SEWER PROFILE**  
SCALE: HOR. 1"=50'  
VER. 1"=5'



**8" SEWER PROFILE**  
SCALE: HOR. 1"=50'  
VER. 1"=5'

97015.DWG (FINAL) (8.5) SEWER-PROF

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
  
Robert Bowen 3-2-99  
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND  
  
M. J. ... 2/15/99  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

**MILDENBERG, BOENDER & ASSOC., INC.**  
Engineers Planners Surveyors  
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042  
(410) 397-0296 Fax (301) 621-5521 Wash (410) 397-0290 Fax



engineering	MMP				
illustration	RCJ				
approval	RJH				
project	97015	MMP	1	REVISED SHC TO LOT 81	2/2000
date	FEB. 1999	BY	NO.	REVISION	DATE

**SEWER PROFILES**  
600' SCALE MAP NO. 31 BLOCK NO. 3, 4

**AUTUMN VIEW, SECTION 3**  
LOTS 76 - 149  
CONTRACT NO.: 14-3729-D  
SECOND ELECTION DISTRICT  
HOWARD COUNTY

scale  
HOR. 1"=50'  
VER. 1"=5'  
**9 OF 10**

**QUANTITY TABLE**

ITEMS	QUANTITIES ESTIMATED	QUANTITIES			MANUFACTURER/SUPPLIER
		QUANTITIES	TYPE	MANUFACTURER/SUPPLIER	
STANDARD MH (HO. CO. STD.G-5.01)	22	22	PRECAST	ATLANTIC	
DROP MH, TYPE "B" (HO. CO. STD. S-1.32)	5	5	PRECAST	ATLANTIC	
TERMINAL MH (HO. CO. STD. S-1.31)	5	5	PRECAST	ATLANTIC	
MANHOLE, VERTICAL FEET	510 L.F.				
8" SEWER MAIN	2,296 L.F.	2,238	P.V.C.	J.M. BELAIR RD SUPPLY	
8" DIP	2,792 L.F.	2,605	D.I.P.	J.M. BELAIR RD SUPPLY	
4" SEWER HOUSE CONNECTION	2,171 L.F.	1,190	P.V.C. (D.I.P.)	J.M. BELAIR RD SUPPLY	
# SEWER HOUSE CONNECTION	78 EACH	78 EA.			
# MH CONNECTIONS	14 EACH	14 EA.			
8" WATER	4,285 L.F.	4,276	D.I.P.		
4" WATER	1,037 L.F.	888	D.I.P.		
1" WATER HOUSE CONNECTION	1,816 L.F.	2,088	K COPPER		
1 1/2" WATER HOUSE CONNECTION	57 L.F.	60	K COPPER		
# 1" WHC	83 EACH	73			
# TWHC	2 EACH	2			
AIR RELEASE MH	1 EACH	1 EA.	PRECAST	ATLANTIC	
F.H.	9 EACH	9 EA.	S.N.F.H.	MUELLER BELAIR RD SUPPLY	
8" x 8" T	7 EACH	7 EA.	D.I.P.	U.S.	
8" x 6" T	9 EACH	9 EA.	D.I.P.	U.S.	
8" x 4" T	4 EACH	4 EA.	D.I.P.	U.S.	
8" V	18 EACH	18 EA.	R.S.		
6" V	9 EACH	9 EA.	R.S.		
4" V	7 EACH	4 EA.	R.S.		
8" CAP & BUTTRESS	7 EACH	7 EA.	D.I.P.	U.S.	
4" CAP & BUTTRESS	3 EACH	4 EA.	D.I.P.	U.S.	
1/16 H.B. (8")	6 EACH	3 EA.	D.I.P.	U.S.	
1/8 H.B. (8")	2 EACH	1 EA.	D.I.P.	U.S.	
1/16 H.B. (4")	3 EACH	1 EA.	D.I.P.	U.S.	
12" X 8" TAPPING SLEEVE, & VALVE	1 EACH	1 EA.	STAINLESS R.S.		
8" X 8" TAPPING SLEEVE & VALVE	1 EACH	1 EA.	STAINLESS R.S.	BELAIR RD SUPPLY	
NAME OF UTILITY CONTRACTOR: C.C.S.					
SURVEY AND DRAFTING DIVISION AS-BUILT DATE					

**EROSION AND SEDIMENT CONTROL FOR THIS CONTRACT IS PROVIDED UNDER F-99-45**

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

*Bruce T. Taylor, Pres* 3/9/99  
DEVELOPER'S SIGNATURE DATE

*R. JACOB HIKMAT* 2/25/99  
ENGINEER'S SIGNATURE DATE

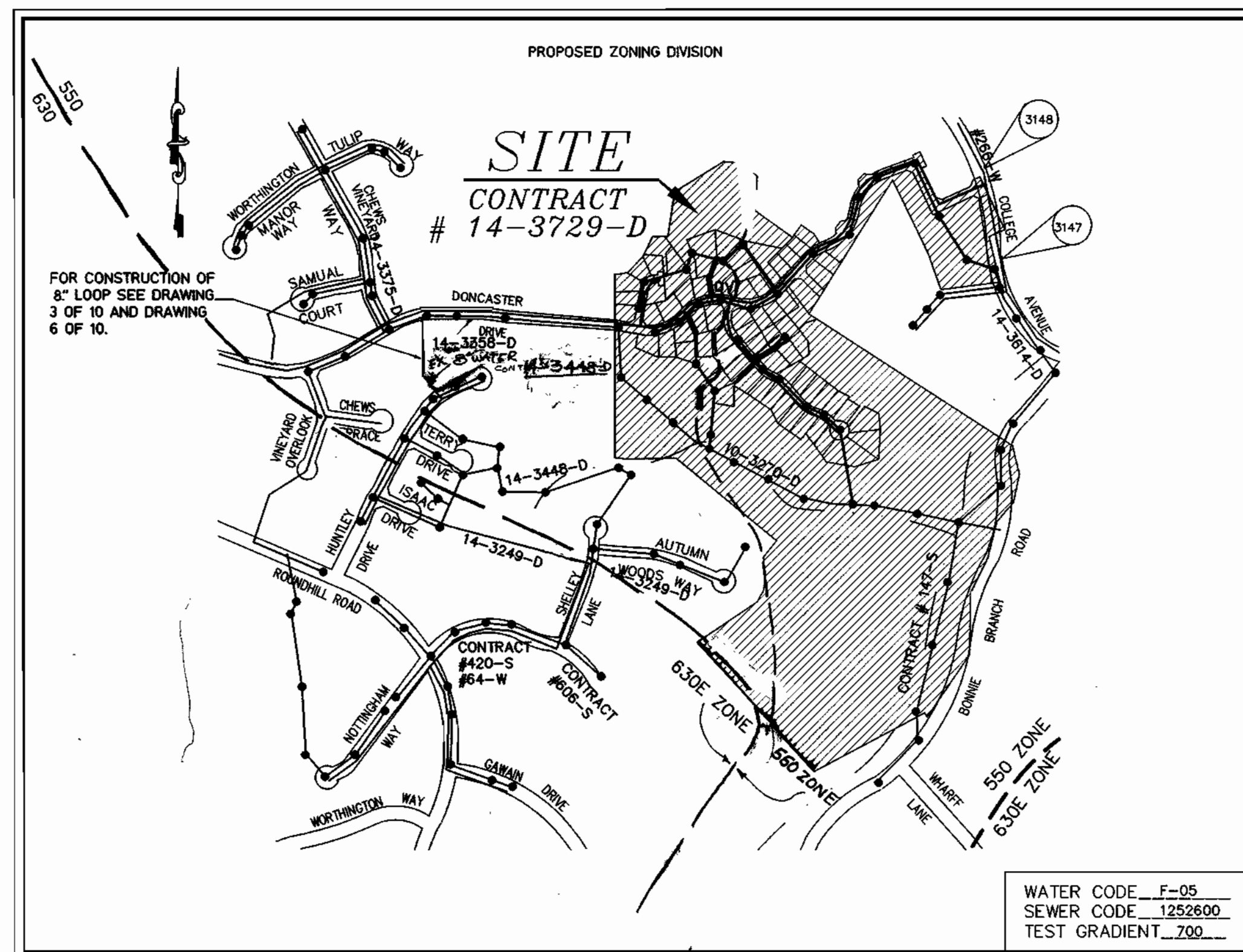
REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS.

*Cheryl Simmons* 3/8/99  
USDA-NATURAL RESOURCES CONSERVATION SERVICE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE SOIL CONSERVATION DISTRICT.

*John R. Reuter* 3-8-99  
HOWARD SCD

PLAN REFERENCE NUMBERS  
S-96-15  
P-98-10  
F-99-45



**VICINITY MAP**  
SCALE: 1"=60'

TYPE OF BUILDING	SFD
No. OF UNITS	72
No. OF WATER HOUSE CONNECTION	72
No. OF SEWER HOUSE CONNECTIONS	72
DRAINAGE AREA	BONNIE BRANCH, PATAPSCO
TREATMENT PLANT	PATAPSCO WASTEWATER TREATMENT PLANT, BALTIMORE

WATER CODE F-05  
SEWER CODE 1252600  
TEST GRADIENT 700

**GENERAL NOTES**

- APPROXIMATE LOCATION OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SUPPLY. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
- ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATES.
- ALL VERTICAL CONTROLS ARE BASED ON U.S.G.S. DATA.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- CLEAR ALL UTILITIES BY A MINIMUM OF 6". CLEAR ALL POLES BY 2'-0" MINIMUM OR TUNNEL AS REQUIRED. THE OWNER HAS CONTACTED THE UTILITY COMPANIES AND HAS MADE ARRANGEMENTS FOR BRACING OF POLES AS SHOWN ON THE DRAWINGS. IN THE EVENT THE CONTRACTOR'S WORK REQUIRES THE BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER FOR BRACING OF ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONEY OWED TO THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF THE POLES.
- FOR DETAILS NOT SHOWN ON THE DRAWINGS, AND FOR MATERIALS AND CONSTRUCTION METHODS USE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAIL FOR CONSTRUCTION (LATEST EDITION). THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB.
- WHERE TEST PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL [ ] AT THE LOCATION OF THE TEST PIT. A NOTE OR NOTES CONTAINING THE RESULTS OF THE TEST PIT OR PITS IS INCLUDED ON THE DRAWINGS. EXISTING UTILITIES IN THE VICINITY OF THE PROPOSED WORK FOR WHICH TEST PITS HAVE NOT BEEN DUG SHALL BE LOCATED BY THE CONTRACTOR TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS AT HIS OWN EXPENSE. CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:  
STATE HIGHWAY ADMINISTRATION (410) 531-5533  
BG & E CO. CONTRACTOR SERVICES (410) 850-4620  
BG & E CO. UNDERGROUND DAMAGE CONTROL (410) 787-9068  
MISS UTILITY 1-800-257-7777  
COLONIAL PIPELINE CO. (410) 795-1390  
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS BUREAU OF UTILITIES (410) 313-4900
- TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT. TREES AND SHRUBS LOCATED OUTSIDE THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
- CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OF THE MAIN.
- THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410)313-2450 AT LEAST FIVE (5) WORKING DAYS BEFORE ANY OPEN CUT OF ANY COUNTY ROAD OR BORING/JACKING OPERATION IN COUNTY ROADS FOR LAYING WATER/SEWER MAINS OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPW REQUIREMENTS PER SECTION 18.114(c) OF HOWARD COUNTY CODE.
- ALL WATER MAINS TO BE D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
- TOPS OF ALL WATER MAINS TO HAVE A MINIMUM OF 3'-1/2" COVER UNLESS OTHERWISE NOTED.
- VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
- ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
- FIRE HYDRANTS SHALL BE SET TO THE BURY LINE ELEVATIONS SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE STRAPPED AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS. SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1000 AND 1005 OF THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
- ALL WATER HOUSE CONNECTIONS SHALL BE FOR INSIDE METER SETTING UNLESS OTHERWISE NOTED ON PLANS OR IN SPECIFICATIONS.
- FOR SPRINKLER SYSTEM FOR ALL TOWNHOMES OR MULTI-FAMILY DWELLING UNITS SHOULD HAVE A MINIMUM OF 1" CONNECTION WITH A 3/4" METER.
- ALL SEWER MAINS SHALL BE P.V.C. OR D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
- FORCE MAINS SHALL BE D.I.P. ONLY.
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVERS, STANDARD DETAIL 65.52. WHERE WATERTIGHT MANHOLE FRAME AND COVER IS USED, SET TOP OF FRAME 1' - 6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATES THAT CELLAR CANNOT BE SERVED.
- STATIONING SHOWN IS WATER MAIN AND CENTER LINE STATIONING.
- CONTRACTOR TO VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION.
- SEDIMENT CONTROL TO BE PROVIDED BY F-99-45.
- ALL SEWER HOUSE CONNECTIONS TO BE 4" IN SIZE.
- ALL WATER HOUSE CONNECTIONS TO BE 1" IN SIZE UNLESS OTHERWISE NOTED.
- ALL CELLARS WILL HAVE SERVICE TO LOWEST FLOOR UNLESS OTHERWISE NOTED.
- THE EXISTING WELL AND SEPTIC SERVING EXISTING HOUSE(S) ARE TO BE ABANDONED.
- STORM DRAIN SYSTEM INDICATED FOR INFORMATIONAL PURPOSES ONLY, SEE ROAD PLANS FOR CONSTRUCTION DATA.
- COMPACTION IN FILL AREAS TO BE 95% AS DETERMINED PER AASHTO T-180.

**INDEX OF DRAWINGS**

NO.	DESCRIPTION
1	TITLE SHEET
2	WATER AND SEWER PLAN
3	WATER AND SEWER PLAN
4	WATER PROFILES
5	WATER PROFILES
6	WATER PROFILES
7	SEWER PROFILES
8	SEWER PROFILES
9	SEWER PROFILES
10	SEWER PROFILES

**CONTRACT NO.: 14-3729-D**  
**AUTUMN VIEW, SECTION 3, LOTS 76-149**  
**WATER AND SEWER MAIN EXTENSIONS**  
**HOWARD COUNTY, MARYLAND**  
**DEPARTMENT OF PUBLIC WORKS**

**TITLE SHEET**

**AUTUMN VIEW, SECTION 3**  
scale AS SHOWN  
LOTS 76 - 149  
CONTRACT NO.: 14-3729-D  
SECOND ELECTION DISTRICT  
HOWARD COUNTY  
**1 of 10**

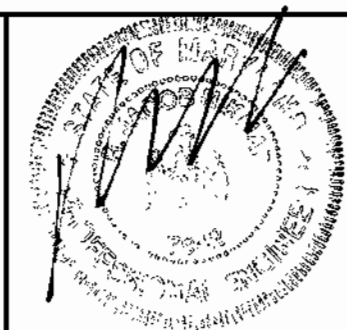
engineering	MMP				
illustration	RCJ				
approval	RJH				
project	97015	K.C.I. 1	AS-BUILT CONDITIONS ADDED TO PLAN	01/03/99	
date	FEB. 1999	BY NO.	REVISION	DATE	

600' SCALE MAP NO. 31 BLOCK NO. 3, 4

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
*Robert B. Reimer* 3-3-99  
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND  
*John R. Reuter* 3/15/99  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

**MILDENBERG, BOENDER & ASSOC., INC.**  
Engineers Planners Surveyors  
5972 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042  
(410) 997-0256 Baltimore (301) 521-5221 Wash. (410) 997-0238 Pa.

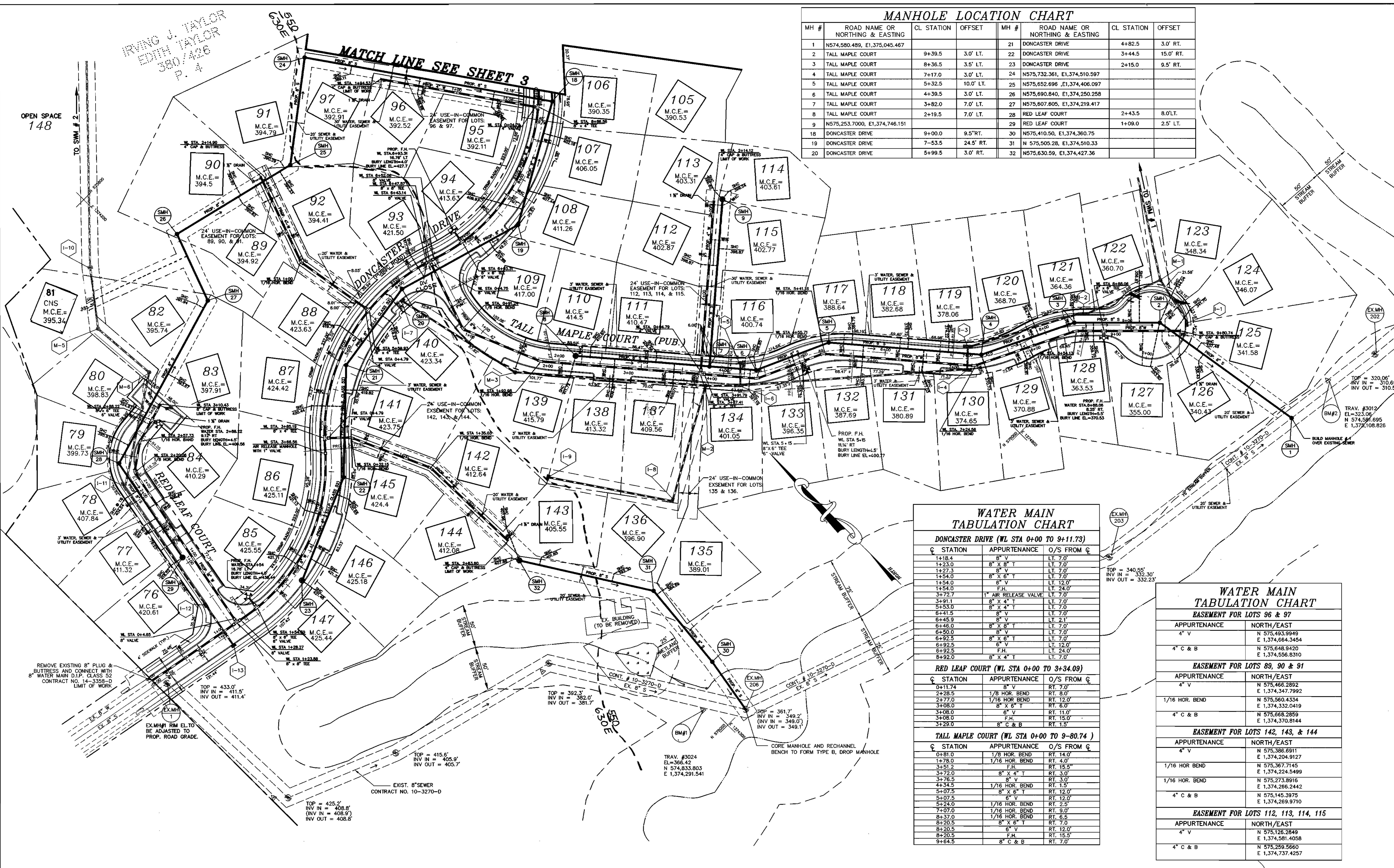




RING J. TAYLOR  
EDITH TAYLOR  
380/426  
P. 4

### MANHOLE LOCATION CHART

MH #	ROAD NAME OR NORTHING & EASTING	CL STATION	OFFSET	MH #	ROAD NAME OR NORTHING & EASTING	CL STATION	OFFSET
1	N574,580.489, E1,375,045.467			21	DONCASTER DRIVE	4+82.5	3.0' RT.
2	TALL MAPLE COURT	9+39.5	3.0' LT.	22	DONCASTER DRIVE	3+44.5	15.0' RT.
3	TALL MAPLE COURT	8+36.5	3.5' LT.	23	DONCASTER DRIVE	2+15.0	9.5' RT.
4	TALL MAPLE COURT	7+17.0	3.0' LT.	24	N575,732.361, E1,374,510.597		
5	TALL MAPLE COURT	5+32.5	10.0' LT.	25	N575,652.698, E1,374,406.097		
6	TALL MAPLE COURT	4+39.5	3.0' LT.	26	N575,690.840, E1,374,250.258		
7	TALL MAPLE COURT	3+82.0	7.0' LT.	27	N575,607.805, E1,374,219.417		
8	TALL MAPLE COURT	2+19.5	7.0' LT.	28	RED LEAF COURT	2+43.5	8.0' LT.
9	N575,253.7000, E1,374,746.151			29	RED LEAF COURT	1+09.0	2.5' LT.
18	DONCASTER DRIVE	9+00.0	9.5' RT.	30	N575,410.50, E1,374,360.75		
19	DONCASTER DRIVE	7-53.5	24.5' RT.	31	N 575,505.28, E1,374,510.33		
20	DONCASTER DRIVE	5+99.5	3.0' RT.	32	N575,630.59, E1,374,427.36		



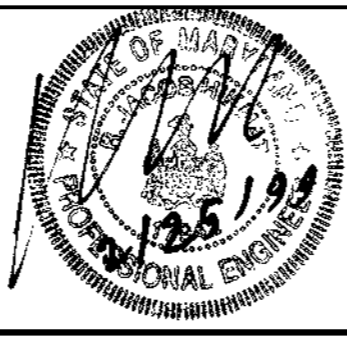
DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*Robert J. Taylor*  
3-3-99  
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND

*Edith Taylor*  
3/1/99  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

**MILDBERG, BOENDER & ASSOC., INC.**  
Engineers Planners Surveyors  
5072 Dorsey Hall Drive, Suite 202, Elkridge City, Maryland 21042  
(410) 897-0296 Cell. (301) 621-5521 Fax. (410) 897-0298 Fax.



engineering	MMP				
illustration	MMP				
approval	RJH				
project	97015	MMP 2	RELOCATE F.H.	7/6/08	
date	FEB. 1999	MMP 1	REVISED SHC TO LOT 81	2/2009	
		BY NO.	REVISION	DATE	

**WATER AND SEWER PLAN**

600' SCALE MAP NO. 31 BLOCK NO. 3, 4

**AUTUMN VIEW, SECTION 3**  
LOTS 76 - 149  
CONTRACT NO.: 14-3729-D  
SECONDELECTION DISTRICT  
HOWARD COUNTY

scale  
1" = 50'  
2 OF 10

### WATER MAIN TABULATION CHART

DONCASTER DRIVE (WL STA 9+07.07 TO 24+53.21)		
STATION	APPURTENANCE	O/S FROM C
10+49.65	8" V	LT. 7.0'
10+54.0	8" X 8" T	LT. 7.0'
10+54.1	8" V	LT. 7.1'
10+58.5	8" V	LT. 7.0'
11+06.5	8" X 6" T	LT. 7.0'
11+06.5	6" V	LT. 12.0'
11+06.5	F.H.	LT. 15.0'
13+75.1	8" V	LT. 7.0'
13+79.5	8" X 8" T	LT. 7.0'
13+84.2	8" V	LT. 7.0'
16+20.5	8" X 6" T	LT. 7.0'
16+20.5	6" V	LT. 12.0'
16+20.5	F.H.	LT. 15.5'
16+61.3	8" V	LT. 7.0'
16+65.5	8" X 8" T	LT. 7.0'
16+69.9	8" V	LT. 7.0'
N 576,167.678	8" X 8" T	
E 1,375,304.729	8" C & B	
19+62.0	8" X 8" T	LT. 7.0'
19+62.0	6" V	LT. 2.0'
19+62.0	F.H.	RT. 15.0'
21+77.0	8" X 8" T	LT. 7.0'
21+82.58	8" V	LT. 7.0'
24+07.5	8" X 8" T	LT. 7.0'
24+07.5	6" V	LT. 12.0'
24+07.5	F.H.	LT. 15.5'
24+57.0	12" X 8" TAPPING SLEEVE & VALVE	LT. 7.0'

HAZEL NUT LANE (WL STA 0+00 TO STA 1+85.47)		
STATION	APPURTENANCE	O/S FROM C
1+78.9	8" C & B	RT. 7.0'

FUTURE ROAD A (WL STA 0+00 TO STA 0+53.62)		
STATION	APPURTENANCE	O/S FROM C
0+12.0	8" V	LT. 6.74'
0+61.0	8" C & B	LT. 7.0'

FUTURE ROAD C (WL STA 0+00 TO STA 0+52.10)		
STATION	APPURTENANCE	O/S FROM C
0+11.93	8" V	RT. 7.0'
0+59.5	8" C & B	RT. 7.0'

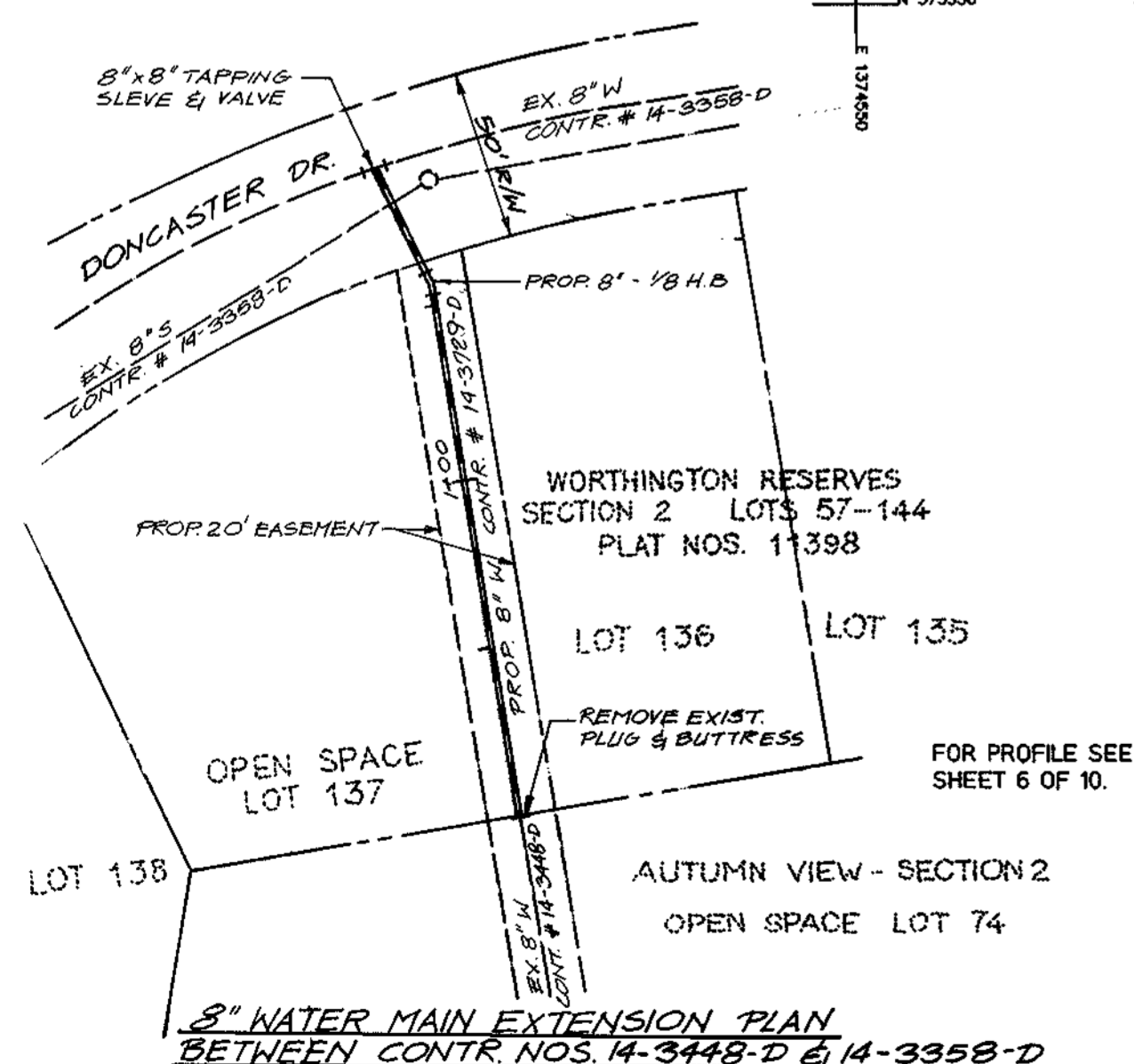
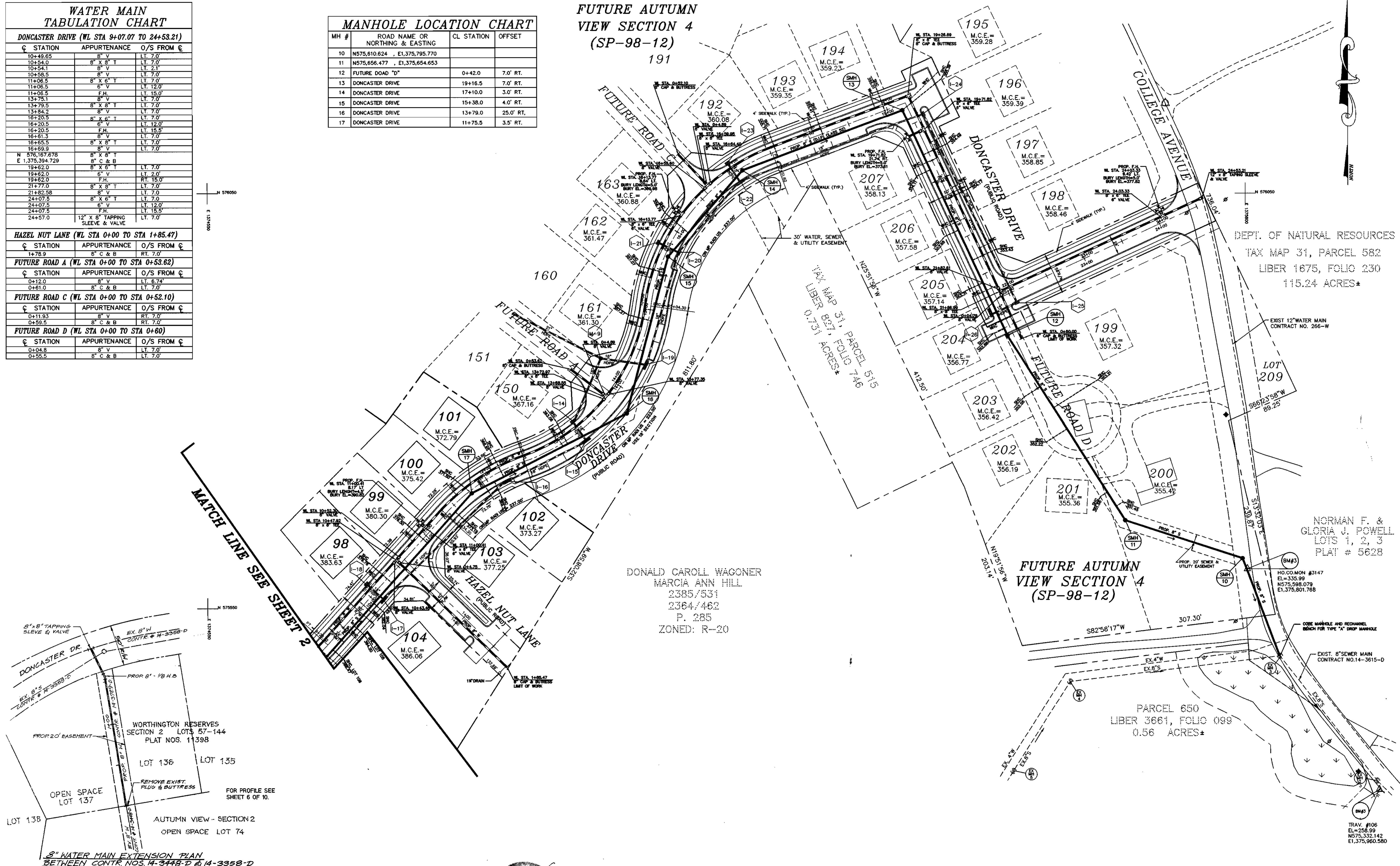
  

FUTURE ROAD D (WL STA 0+00 TO STA 0+60)		
STATION	APPURTENANCE	O/S FROM C
0+04.8	8" V	LT. 7.0'
0+55.5	8" C & B	LT. 7.0'

### MANHOLE LOCATION CHART

MH #	ROAD NAME OR NORTHING & EASTING	CL STATION	OFFSET
10	N575,610.624 , E1,375,795.770		
11	N575,656.477 , E1,375,654.653		
12	FUTURE ROAD "D"	0+42.0	7.0' RT.
13	DONCASTER DRIVE	19+16.5	7.0' RT.
14	DONCASTER DRIVE	17+10.0	3.0' RT.
15	DONCASTER DRIVE	15+38.0	4.0' RT.
16	DONCASTER DRIVE	13+79.0	25.0' RT.
17	DONCASTER DRIVE	11+75.5	3.5' RT.

### FUTURE AUTUMN VIEW SECTION 4 (SP-98-12)



DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND

*Robert M. Berman* 3-3-99  
CHIEF, BUREAU OF UTILITIES DATE

*Mark A. ...* 3/15/99  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

**MILDENBERG, BOENDER & ASSOC., INC.**  
Engineers Planners Surveyors  
5472 Dorsey Hall Drive, Suite 202, Beltsville, Maryland 21042  
(410) 997-0286 Baltimore (301) 621-5521 Wash. (910) 997-0286 Fax

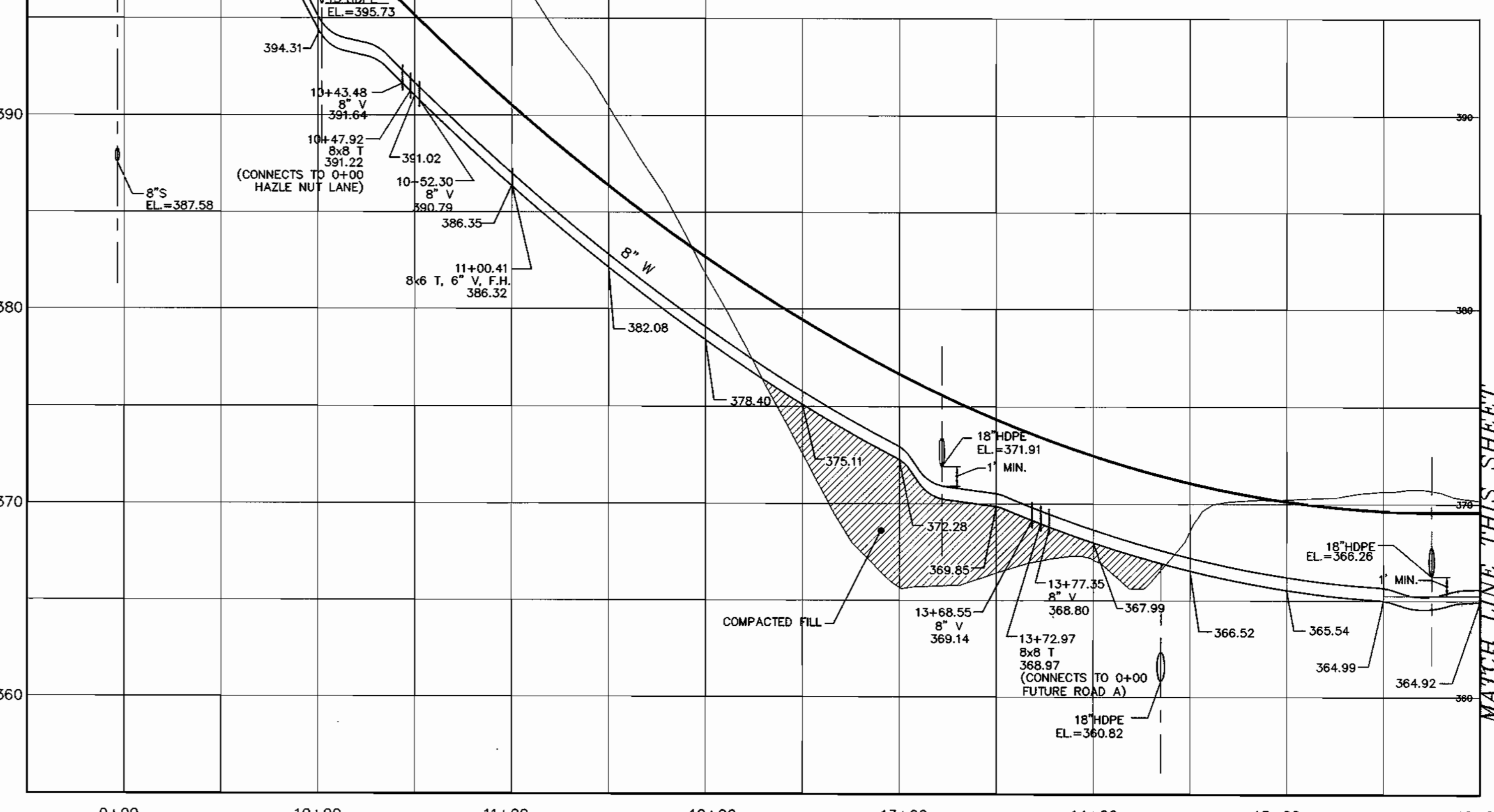
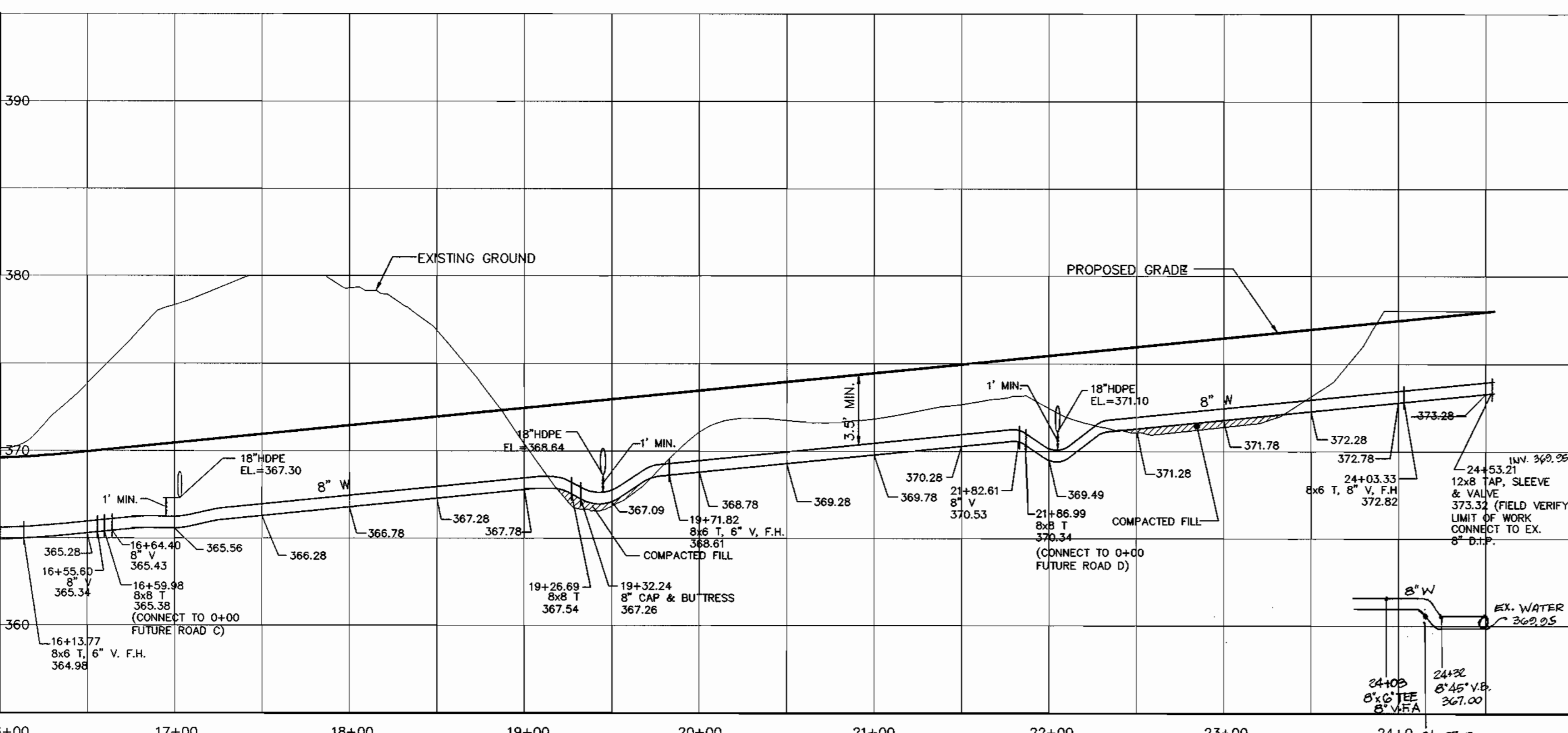
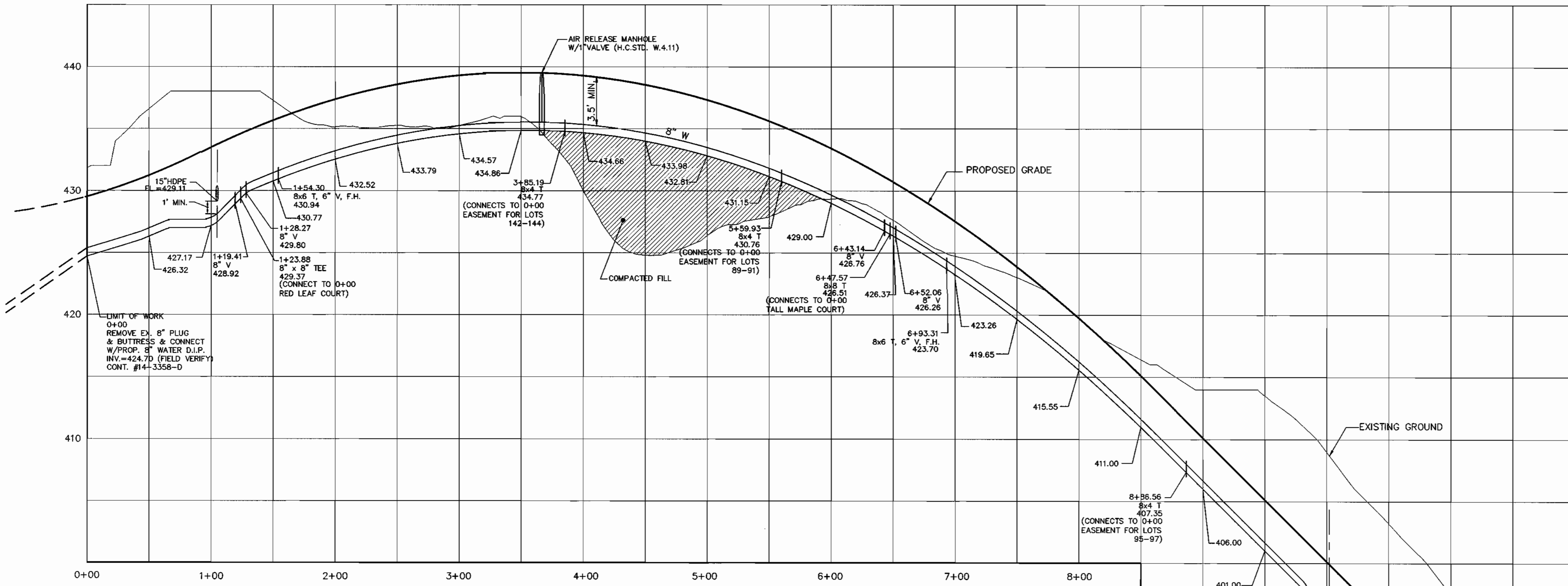
engineering	MMP				
illustration	RJ				
approval	RJH				
project	97015				
date	FEB. 1999	BY	NO.	REVISION	DATE

**WATER AND SEWER  
PLAN**

600' SCALE MAP NO. 31 BLOCK NO. 3, 4

**AUTUMN VIEW, SECTION 3**  
LOTS 76 - 149  
CONTRACT NO.: 14-3729-D  
SECOND ELECTION DISTRICT  
HOWARD COUNTY

scale  
1" = 50'  
**3 of 10**



**8" WATER PROFILE (DONCASTER DRIVE)**

SCALE: HOR. 1"=50'  
VER. 1"=5'

**8" WATER PROFILE (DONCASTER DRIVE)**

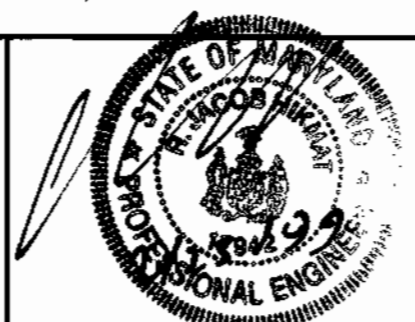
SCALE: HOR. 1"=50'  
VER. 1"=5'

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND

**MILDENBERG,  
BOENDER & ASSOC., INC.**  
Engineers Planners Surveyors

5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042  
(410) 997-0298 Balt. (301) 621-5521 Wash. (410) 997-0288 Fax.



engineering	MMP				
illustration	RJ				
approval	RJH				
project	97015	KCI	1	AS BUILT CONDITIONS ADDED TO PLAN	01/04/99
date	FEB.1999	BY	NO.	REVISION	DATE

**WATER  
PROFILES**

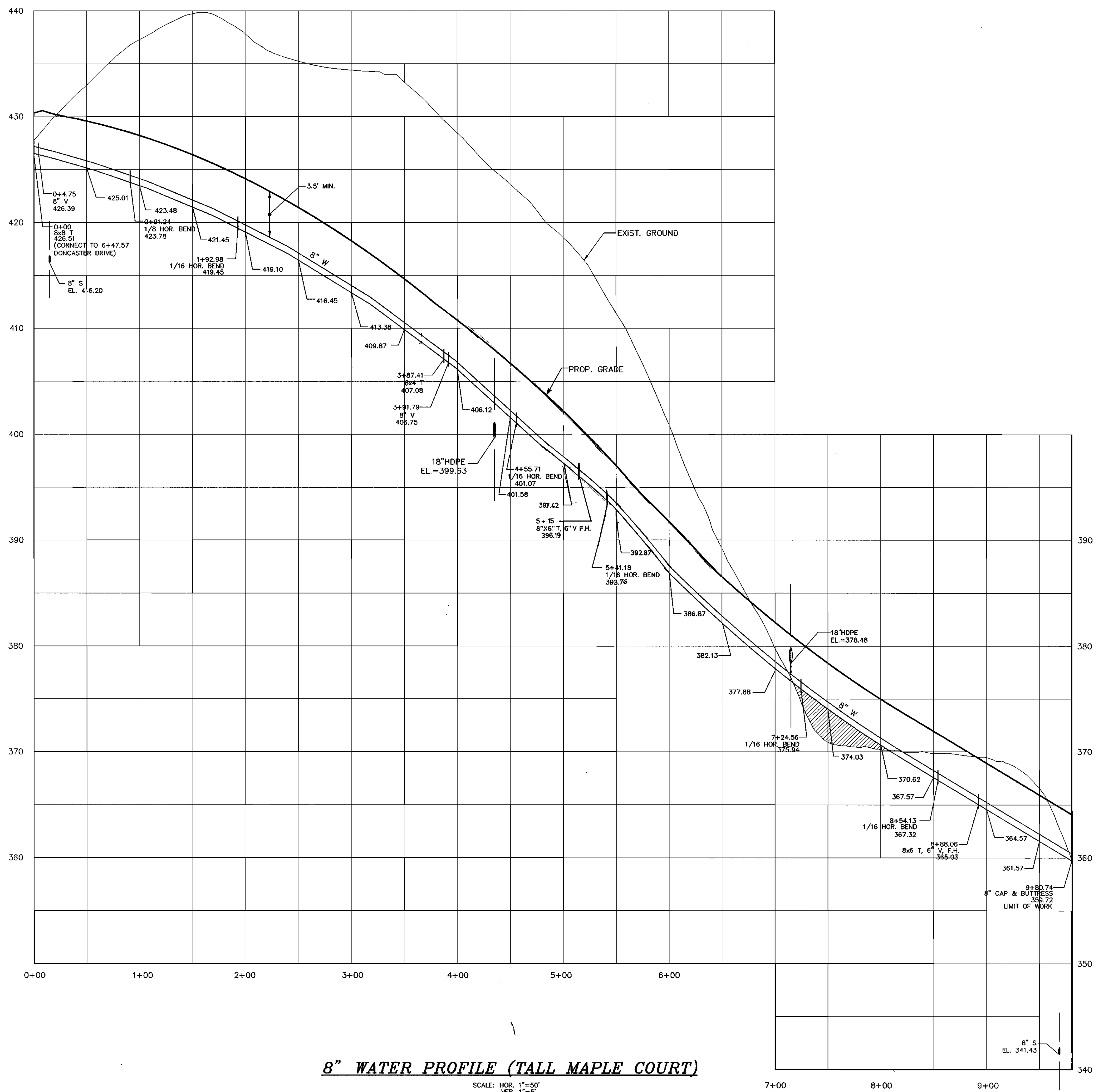
**AUTUMN VIEW, SECTION 3**  
LOTS 76 -149  
CONTRACT NO.:14-3729-D  
SECOND ELECTION DISTRICT  
HOWARD COUNTY

97015\DWG\FINAL\W&S\408\WATERPROFILES

Robert J. Henning 3-3-99  
CHIEF, BUREAU OF UTILITIES DATE

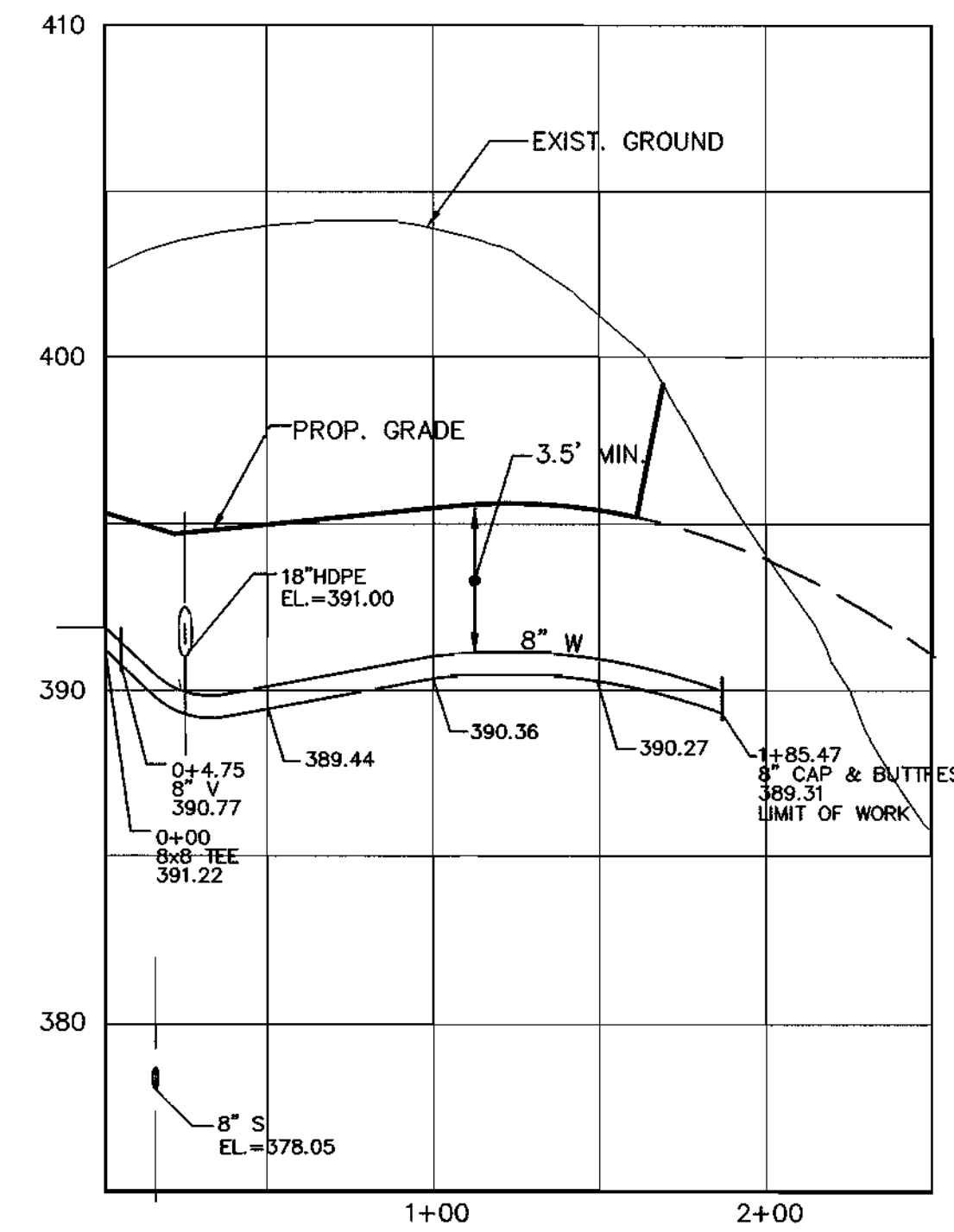
Chief, Development Engineering Division 3/15/99  
DATE

600' SCALE MAP NO. 31 BLOCK NO. 3.4



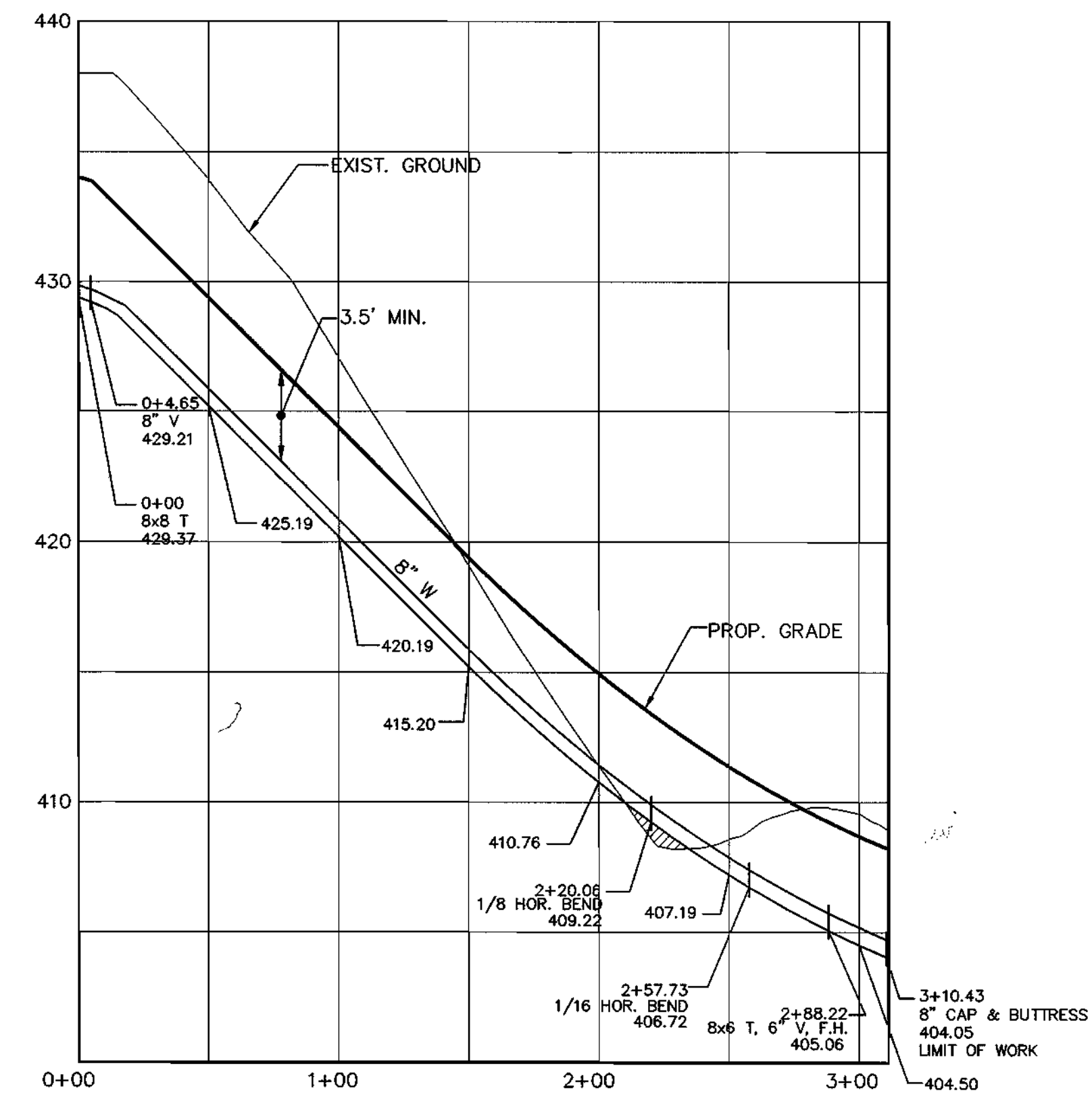
**8" WATER PROFILE (TALL MAPLE COURT)**

SCALE: HOR. 1"=50'  
VER. 1"=5'



**8" WATER PROFILE  
(HAZEL NUT LANE)**

SCALE: HOR. 1"=50'  
VER. 1"=5'



**8" WATER PROFILE (RED LEAF COURT)**

SCALE: HOR. 1"=50'  
VER. 1"=5'

97015 (DWG) FINAL 1/25/99 9:14 AM

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
*Robert Beaman*  
CHIEF, BUREAU OF UTILITIES  
3-3-99  
DATE

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND  
*Michael DeLorenzo*  
CHIEF, DEVELOPMENT ENGINEERING DIVISION  
3/15/99  
DATE

**MILDENBERG,  
BOENDER & ASSOC., INC.**  
Engineers Planners Surveyors  
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042  
(410) 997-0296 Bal. (301) 621-5521 Wash. (410) 997-0298 Fax.

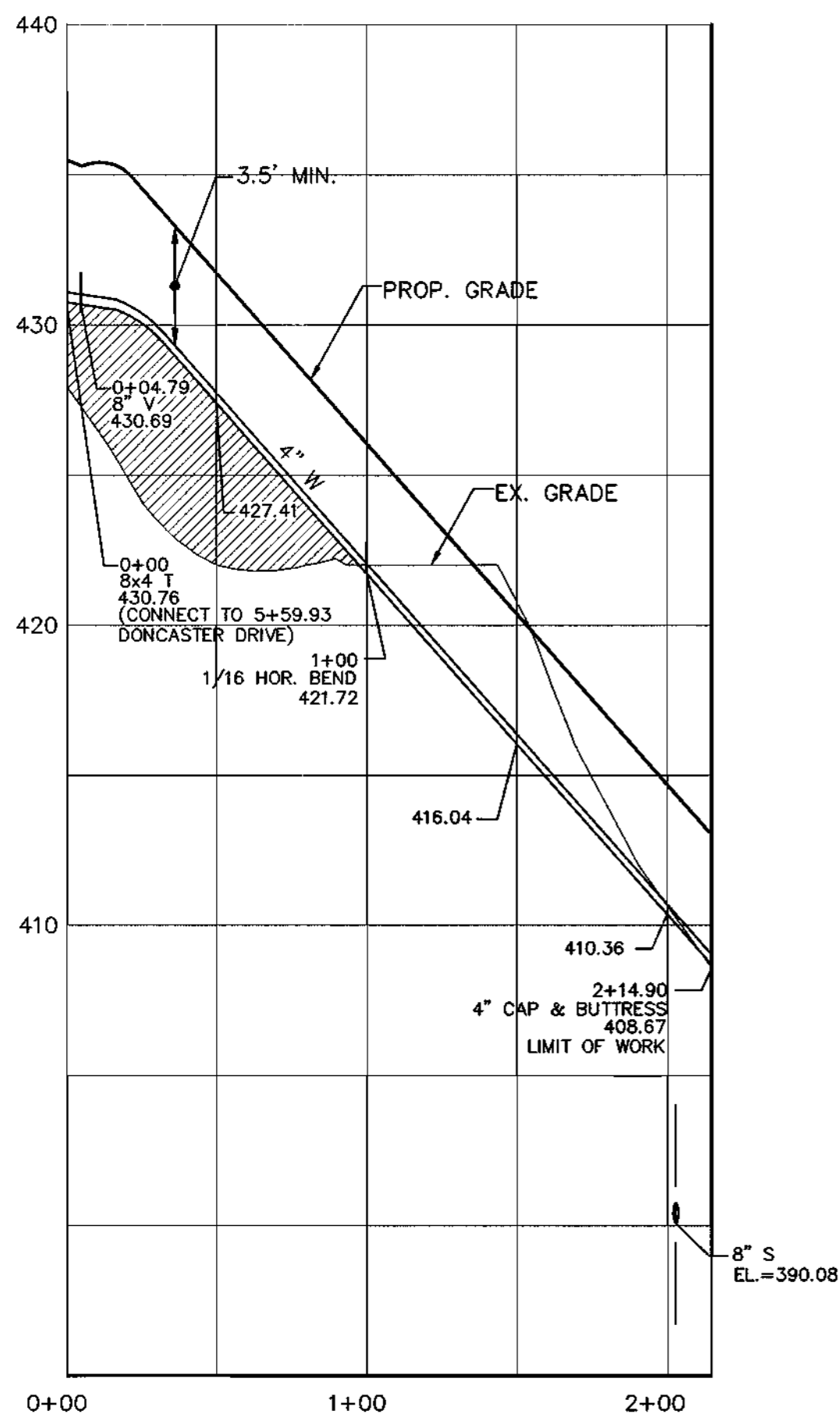


engineering	MMP				
illustration	RCJ				
approval	RJH				
project	97015	MP	1	RELOCATE F.H. CORRECTED PROP. GRADE	7/6/00
date	FEB 1999	BY	NO.	REVISION	DATE

**WATER  
PROFILES**  
600' SCALE MAP NO. 31 BLOCK NO. 3, 4

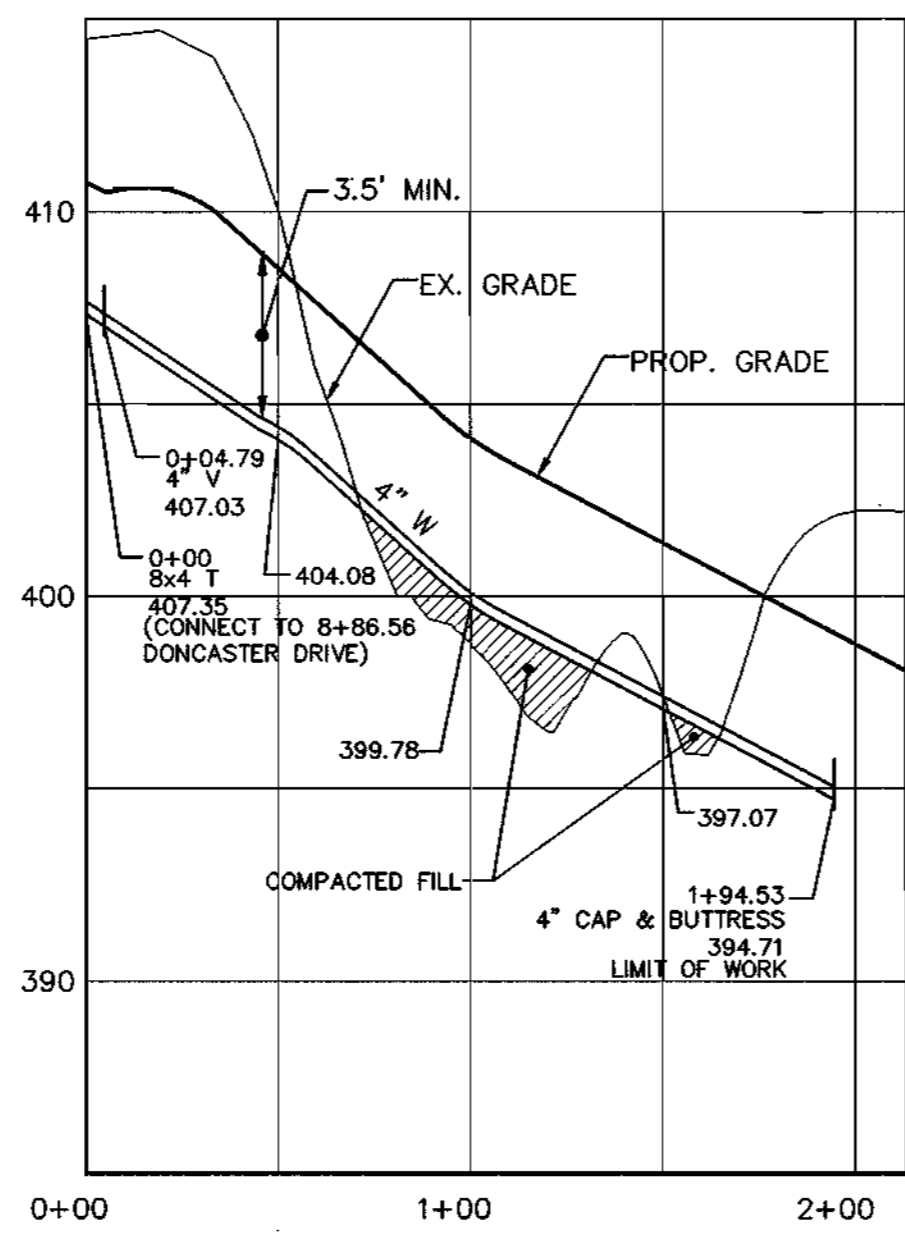
**AUTUMN VIEW, SECTION 3**  
LOTS 76 - 149  
CONTRACT NO.: 14-3729-D  
SECOND ELECTION DISTRICT  
HOWARD COUNTY

scale  
HOR. 1"=50'  
VER. 1"=5'  
**5 OF 10**



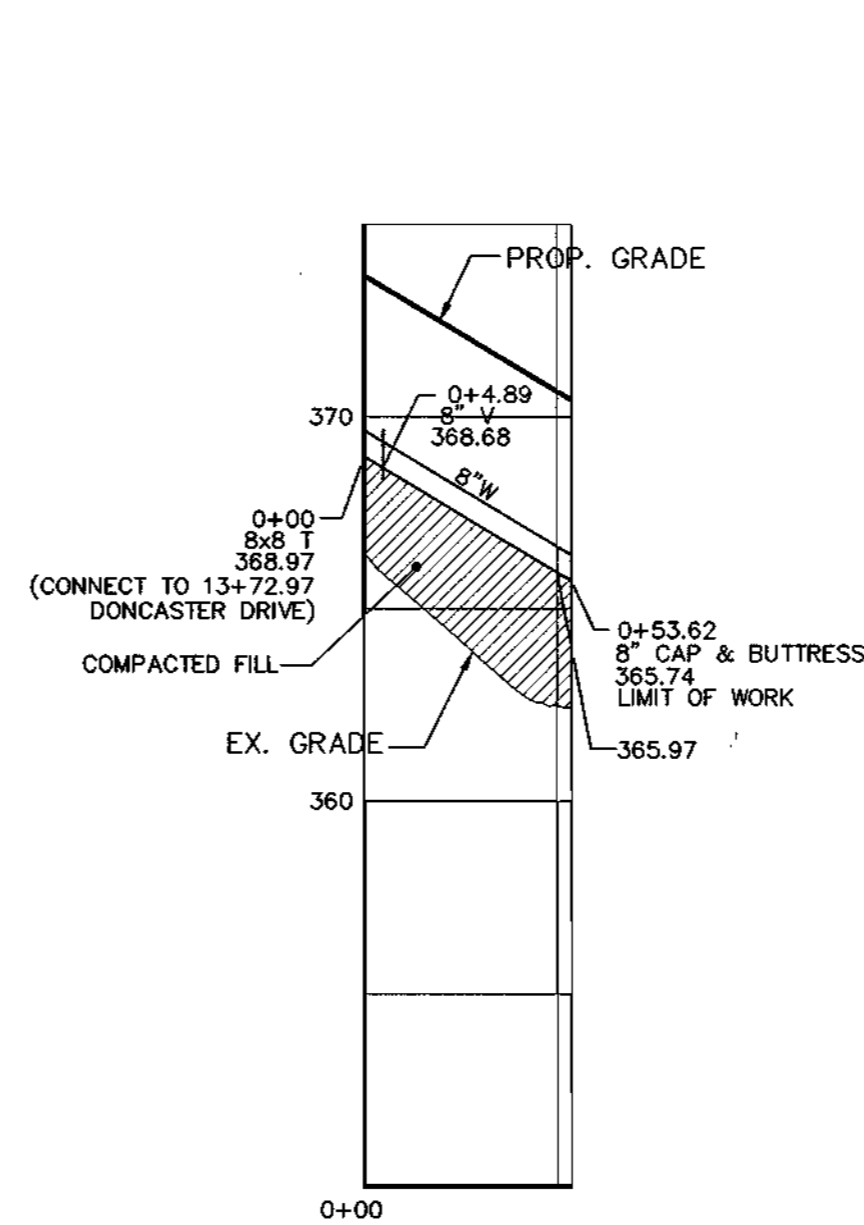
**4" WATER PROFILE  
EASEMENT FOR LOTS: 89, 90 & 91**

SCALE: HOR. 1"=50'  
VER. 1"=5'



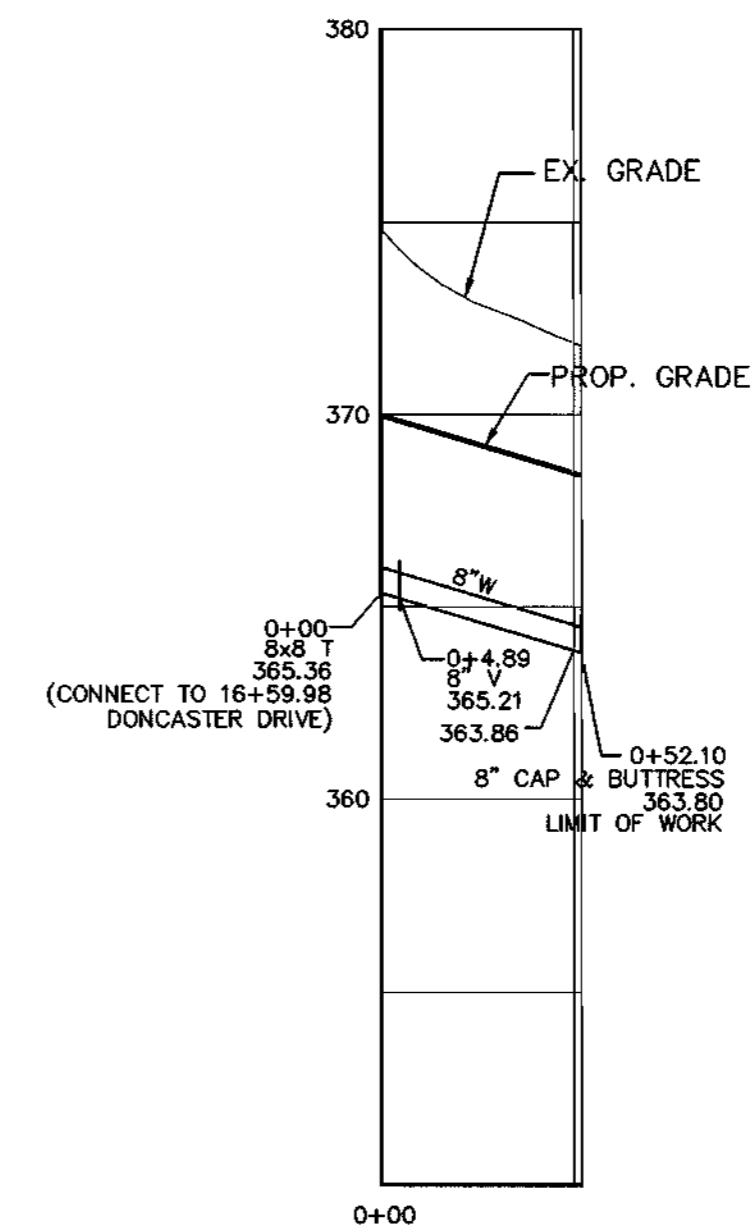
**4" WATER PROFILE  
EASEMENT FOR LOTS: 96 & 97**

SCALE: HOR. 1"=50'  
VER. 1"=5'



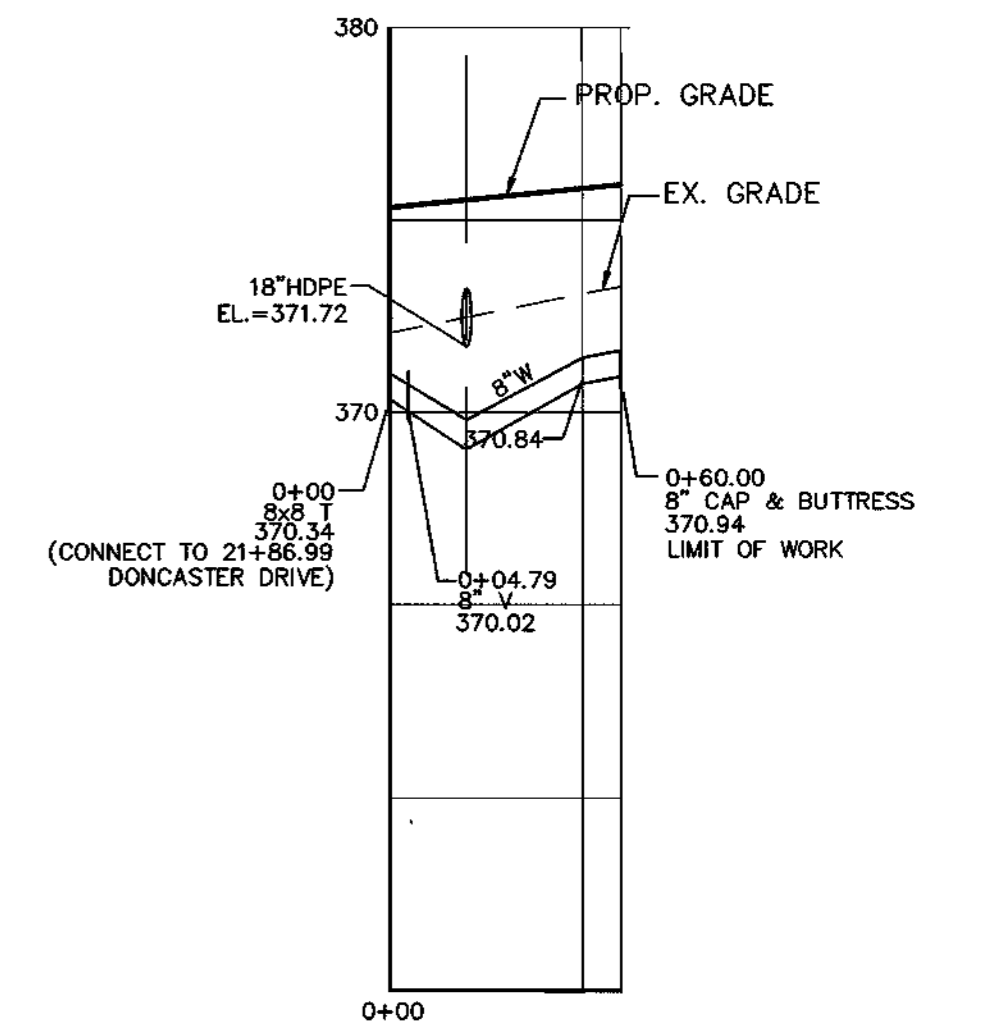
**8" WATER PROFILE  
FUTURE ROAD "A"**

SCALE: HOR. 1"=50'  
VER. 1"=5'



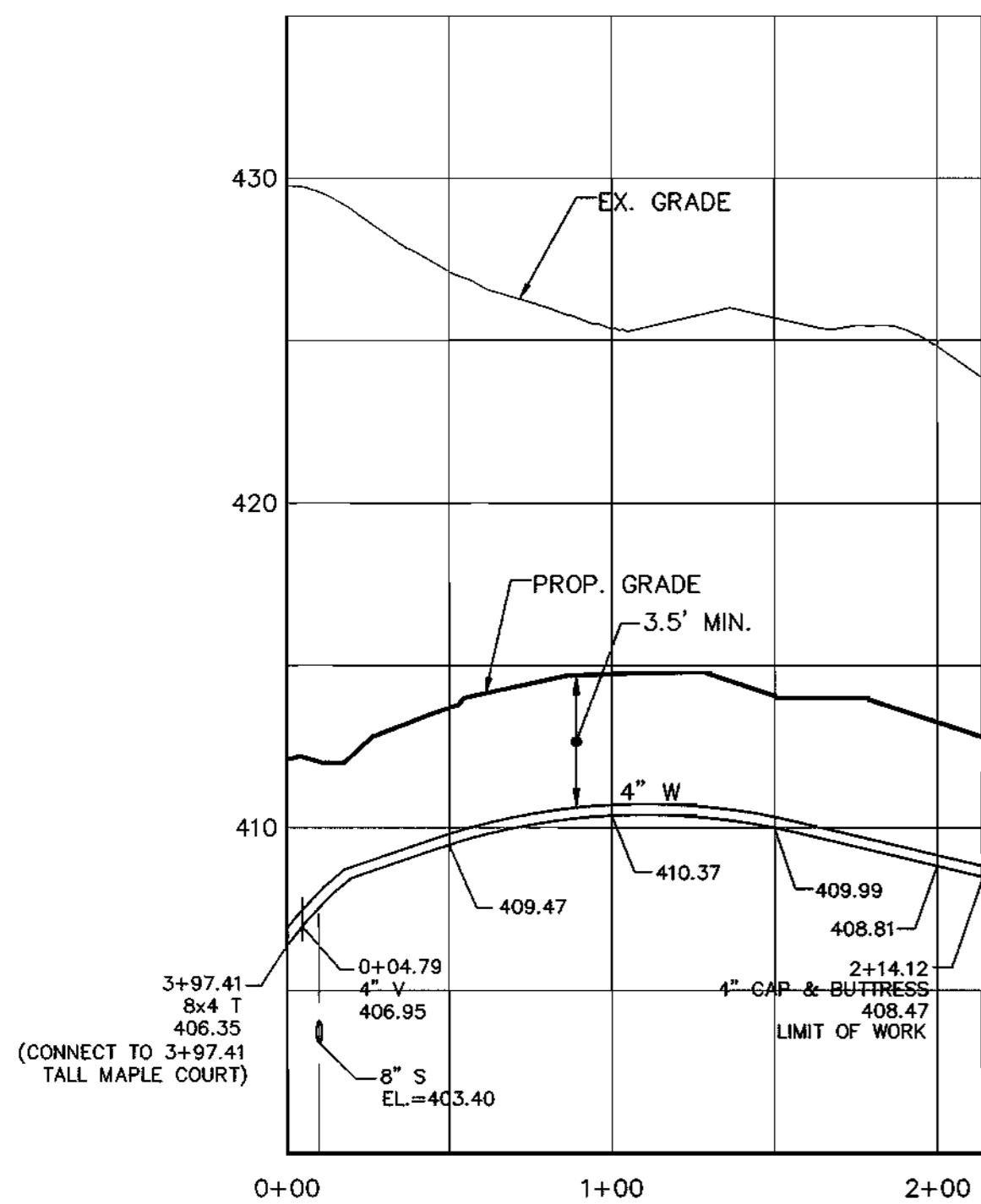
**8" WATER PROFILE  
FUTURE ROAD "C"**

SCALE: HOR. 1"=50'  
VER. 1"=5'



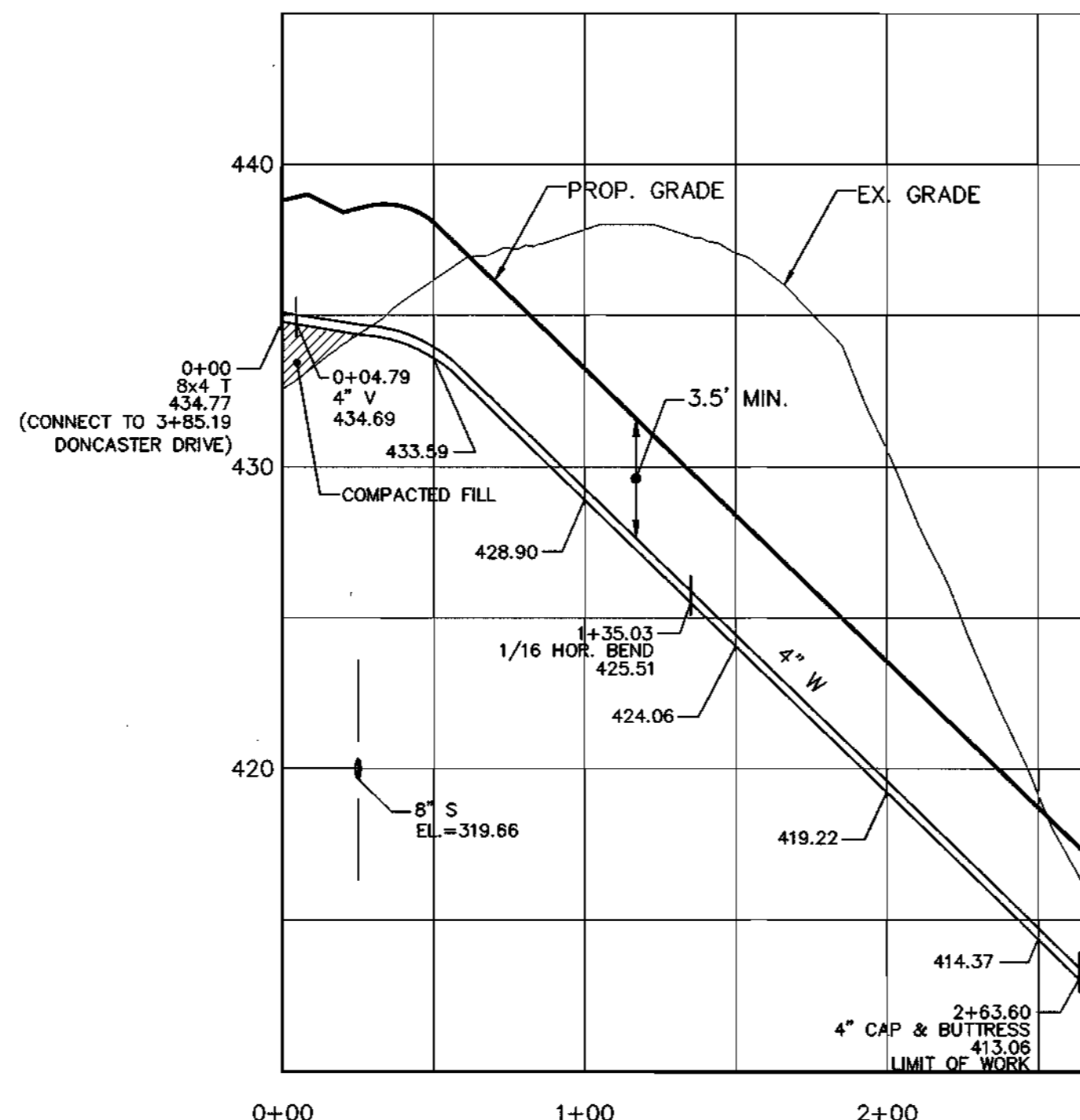
**8" WATER PROFILE  
FUTURE ROAD "D"**

SCALE: HOR. 1"=50'  
VER. 1"=5'



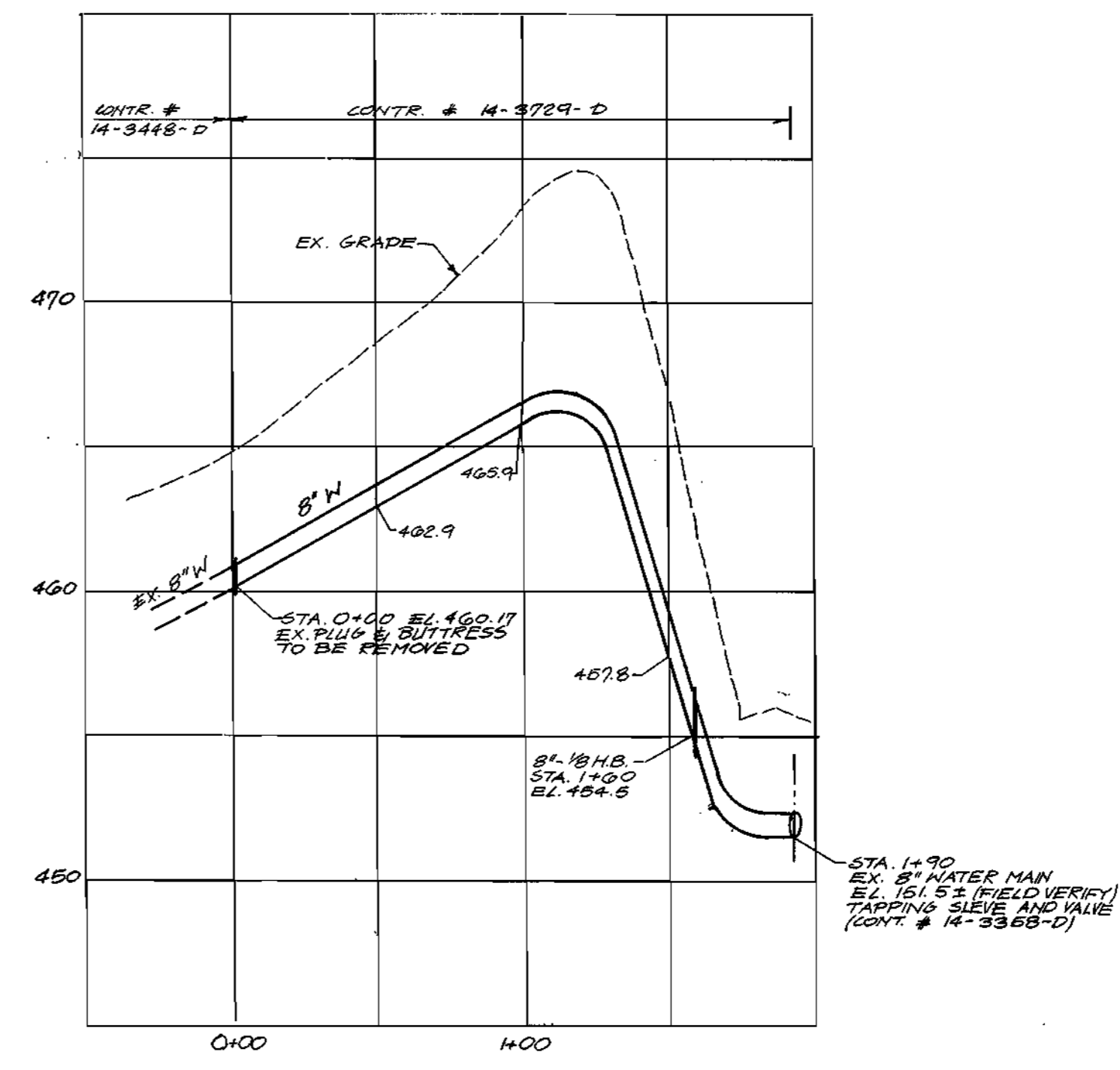
**4" WATER PROFILE  
EASEMENT FOR LOTS: 112, 113, 114 & 115**

SCALE: HOR. 1"=50'  
VER. 1"=5'



**4" WATER PROFILE  
EASEMENT FOR LOTS: 142, 143 & 144**

SCALE: HOR. 1"=50'  
VER. 1"=5'



**8" WATER PROFILE  
BETWEEN CONTR. NOS. 14-3448-D  
AND 14-3358-D**

SCALE: HOR. 1"=50'  
VER. 1"=5'

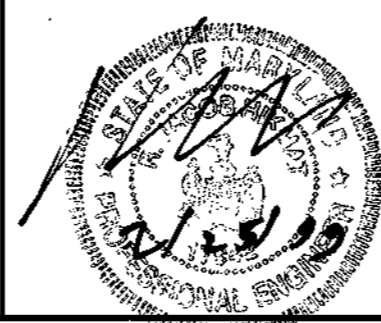
57015.DWG (FINAL) (M&S) (SOP) 9/14/99

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND

**MILDENBERG,  
BOENDER & ASSOC., INC.**  
Engineers Planners Surveyors

5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042  
(410) 997-0296 Fax (301) 621-5521 Wash. (410) 997-0298 Fax



engineering	MMP						
illustration	RCJ						
approval	RJH						
project	97015						
date	FEB 1999	BY	NO.	REVISION	DATE	60' SCALE MAP NO. 31	BLOCK NO. 3, 4

**WATER  
PROFILES**

**AUTUMN VIEW, SECTION 3**  
LOTS 76 - 149  
CONTRACT NOS. 14-3729-D  
SECOND ELECTION DISTRICT  
HOWARD COUNTY

scale  
HOR. 1"=50'  
VER. 1"=5'

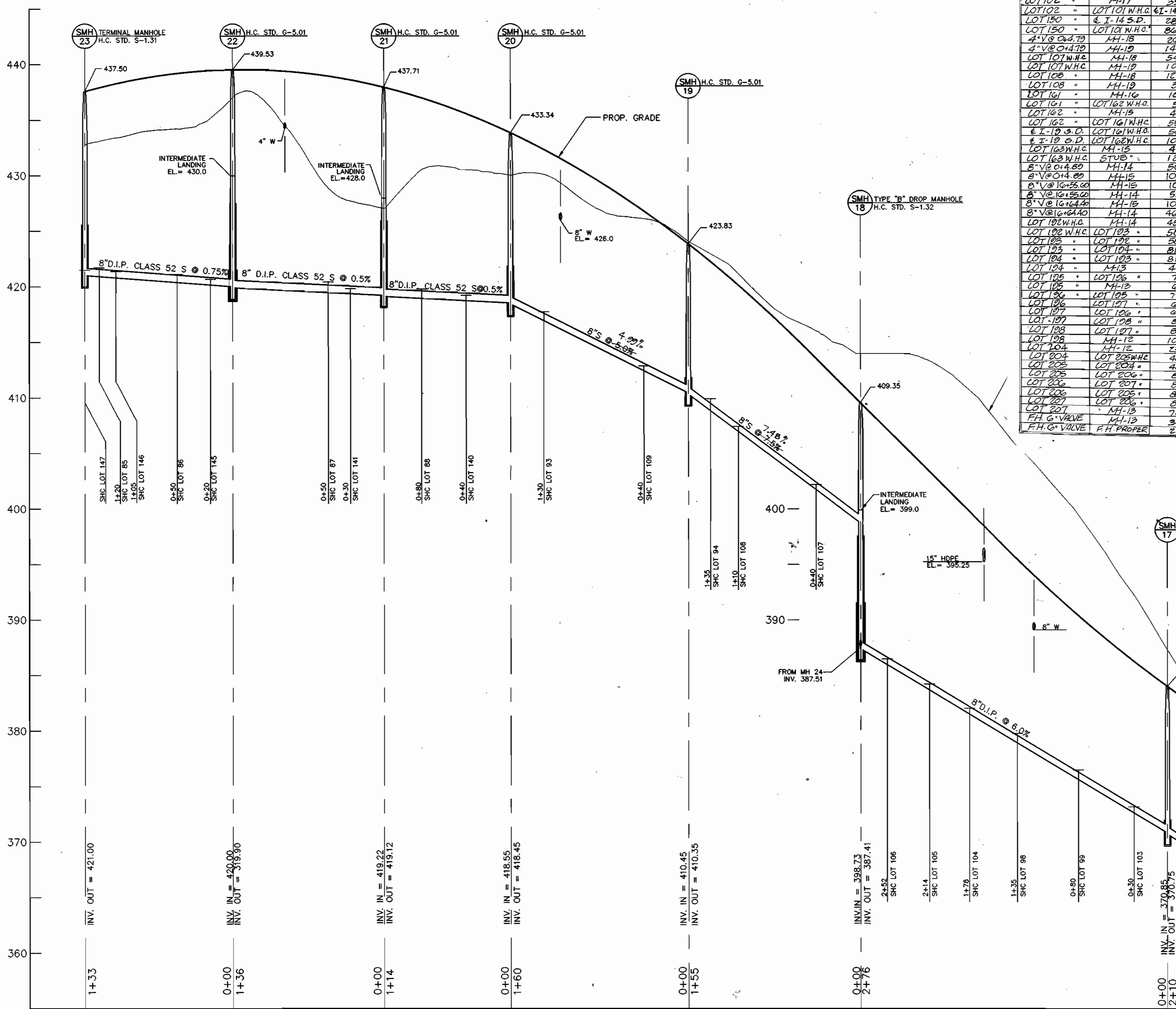


Table with columns for WATER ABSENT CONTINUED, SEWER ABSENT, and WATER ABSENT. It lists lot numbers, manhole IDs, pipe sizes, and elevations for various sewer lines.

8" SEWER PROFILES (DONCASTER DRIVE)

SCALE: HOR - 1"=50' VER - 1"=5'

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND

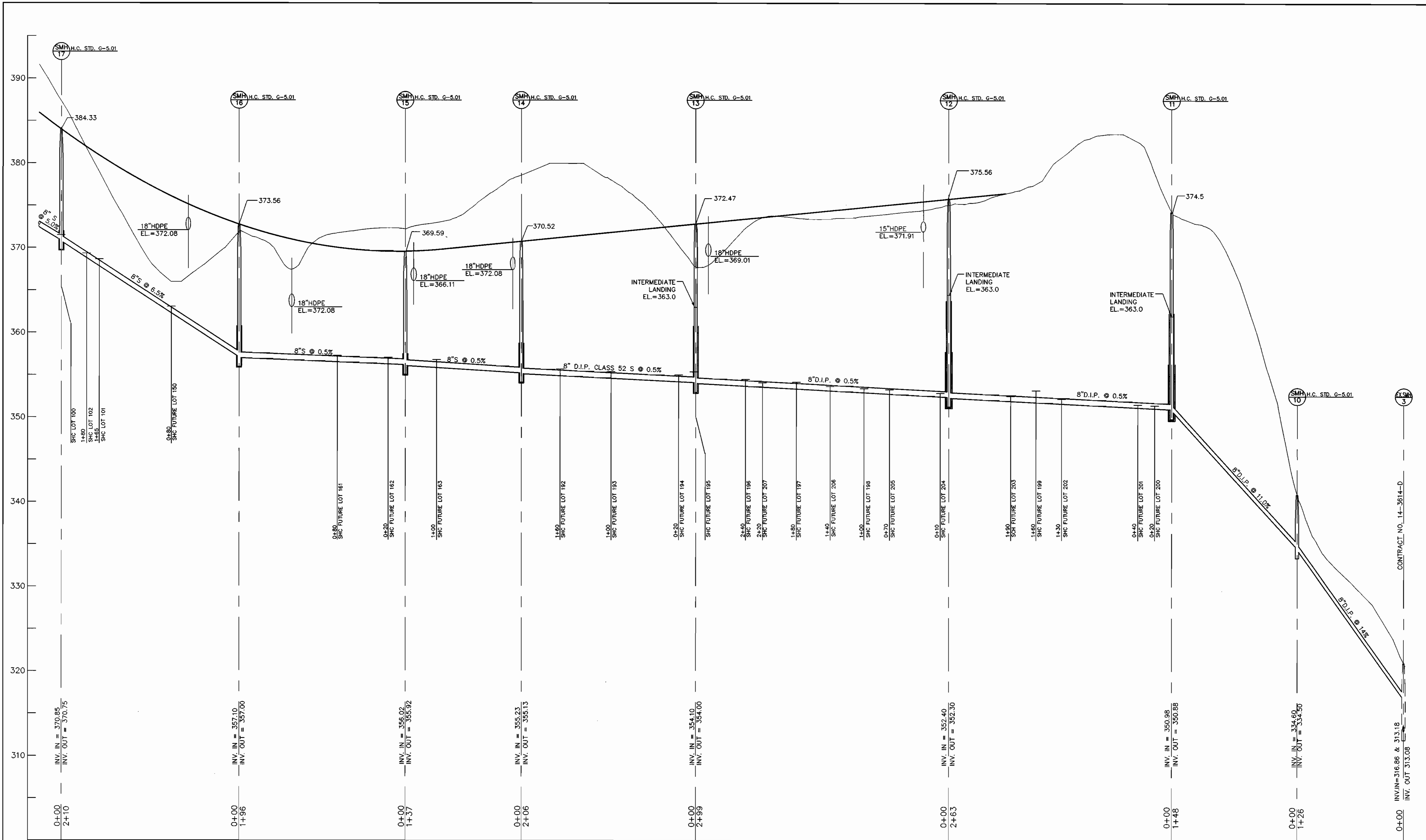
MILDENBERG, BOENDER & ASSOC., INC. Engineers Planners Surveyors



Project information table including engineering (MMP), illustration (RCJ), approval (RJH), project (97015), date (FEB. 1999), and revision details.

SEWER PROFILES

AUTUMN VIEW, SECTION 3 LOTS 76 - 149 CONTRACT NO. 14-3729-D SECOND ELECTION DISTRICT HOWARD COUNTY



**8" SEWER PROFILES (DONCASTER DRIVE)**

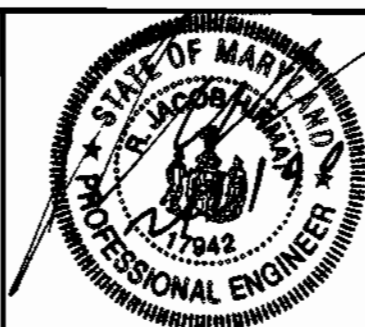
HOR - 1"=50'  
VER - 1"=5'

97015.DWG\FINAL\MS\SEW-PROF

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
*Robert W. Beninger* 3-3-99  
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND  
*Michael J. ...* 3/15/99  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

**MILDENBERG, BOENDER & ASSOC., INC.**  
Engineers Planners Surveyors  
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042  
(410) 997-0286 Ball. (301) 621-5521 Wash. (410) 997-0288 Fax.



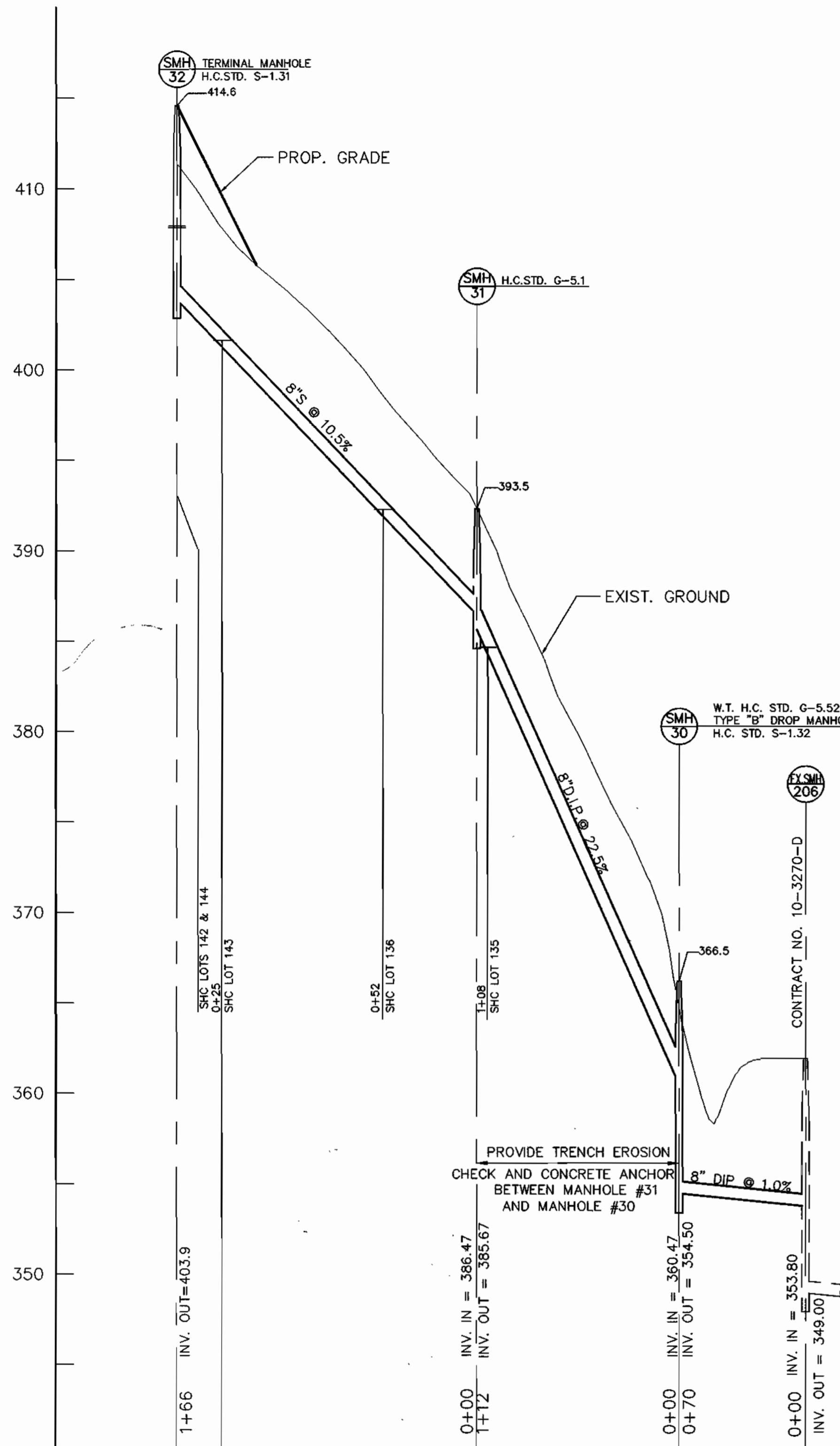
engineering	MMP				
illustration	RCJ				
approval	RJH				
project	97015				
date	FEB. 1999	BY	NO.	REVISION	DATE

**SEWER PROFILES**  
600' SCALE MAP NO. 31 BLOCK NO. 3, 4

**AUTUMN VIEW, SECTION 3**  
LOTS 76 - 149  
CONTRACT NO.: 14-3729-D  
SECOND ELECTION DISTRICT  
HOWARD COUNTY

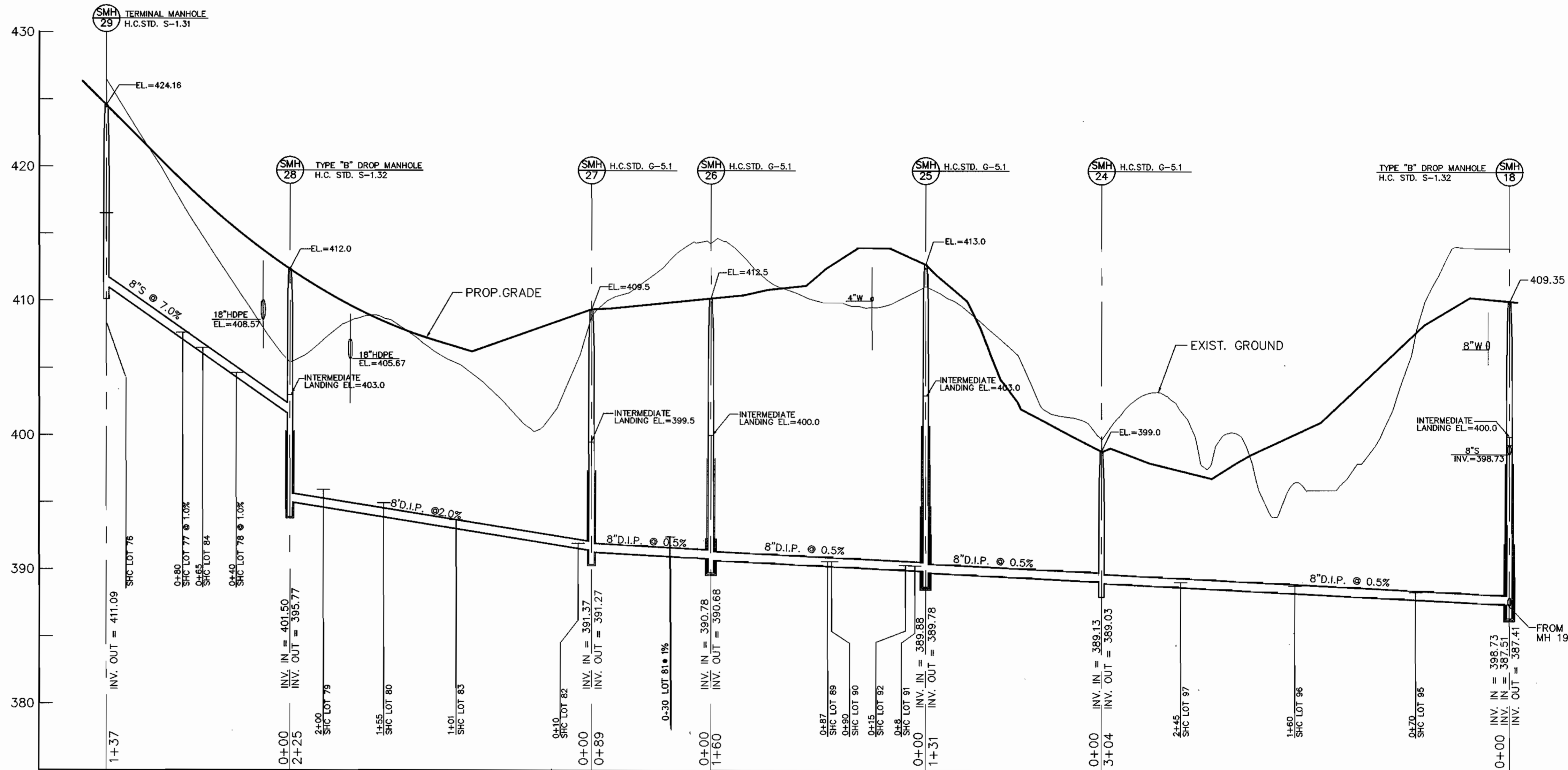
scale  
HOR: 1"=50'  
VER: 1"=5'  
**8 OF 10**

CONTRACT NO. 14-3614-D



**8" SEWER PROFILE**

SCALE: HOR. 1"=50'  
VER. 1"=5'



**8" SEWER PROFILE**

SCALE: HOR. 1"=50'  
VER. 1"=5'

97015 DWG FINAL WKS5 SEWER-PROF

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
  
*Robert Beaman* 3-2-99  
 CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND  
  
*Mr. Dan...* 2/15/99  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

**MILDENBERG, BOENDER & ASSOC., INC.**  
 Engineers Planners Surveyors  
 5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042  
 (410) 987-0286 Fax. (301) 621-5321 Wash. (410) 987-0289 Fax.



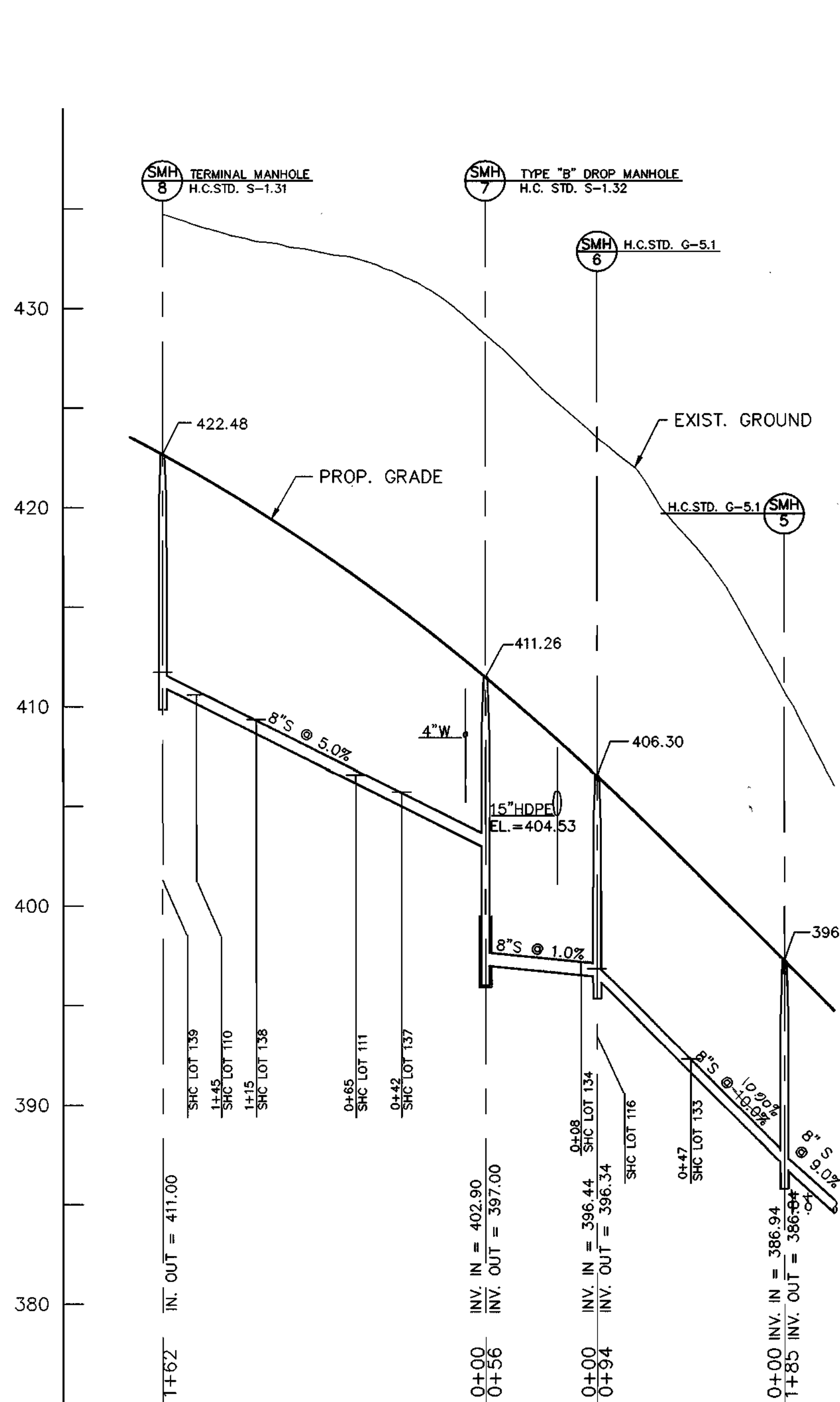
engineering	MMP			
illustration	RCJ			
approval	RJH			
project	97015	MMP 1	REVISED SHC TO LQT 81	2/2000
date	FEB. 1999	BY NO.	REVISION	DATE

**SEWER PROFILES**  
 600' SCALE MAP NO. 31 BLOCK NO. 3, 4

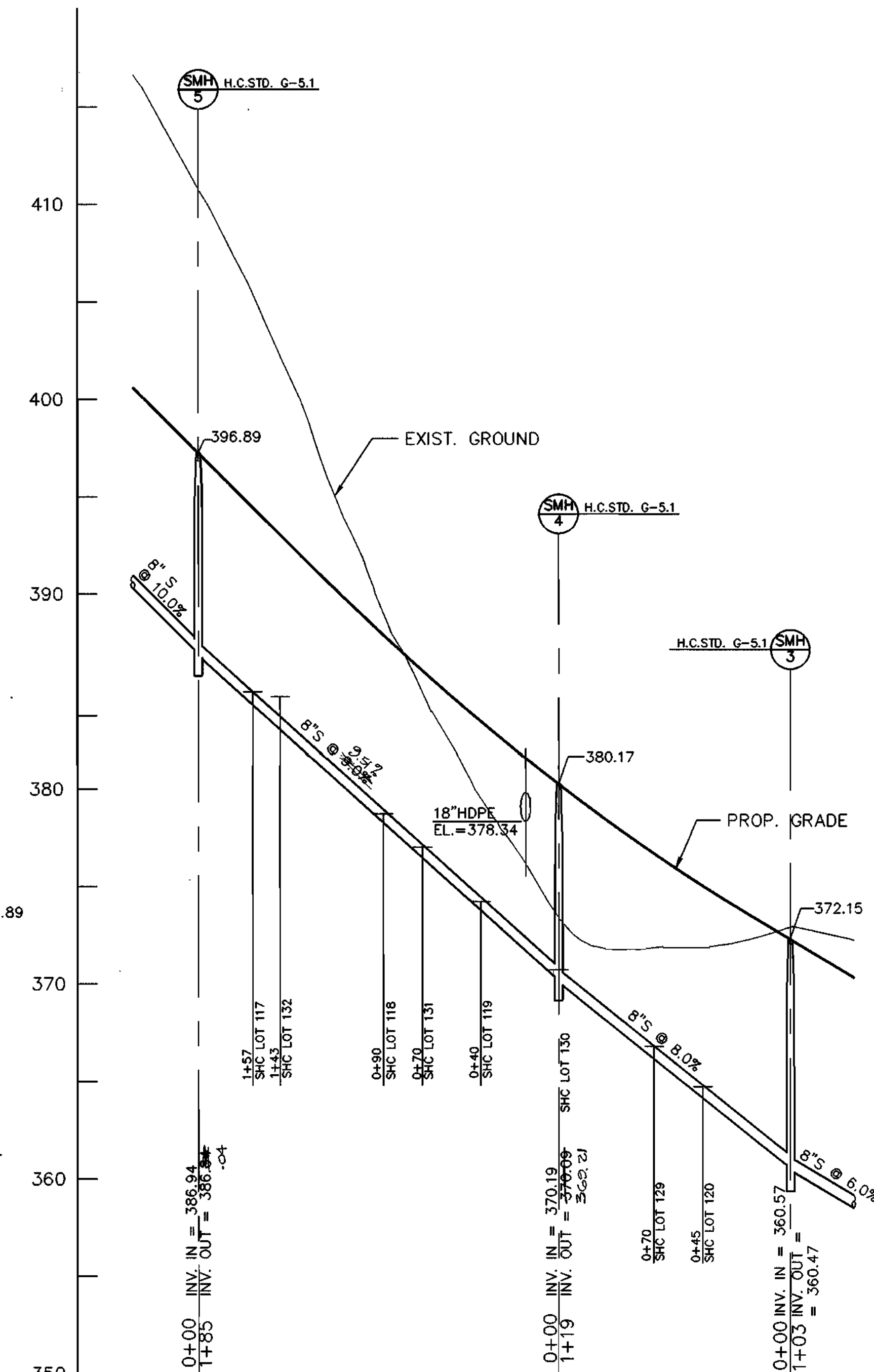
**AUTUMN VIEW, SECTION 3**  
 LOTS 76 - 149  
 CONTRACT NO.: 14-3729-D  
 SECOND ELECTION DISTRICT  
 HOWARD COUNTY

scale  
 HOR. 1"=50'  
 VER. 1"=5'  
**9 OF 10**

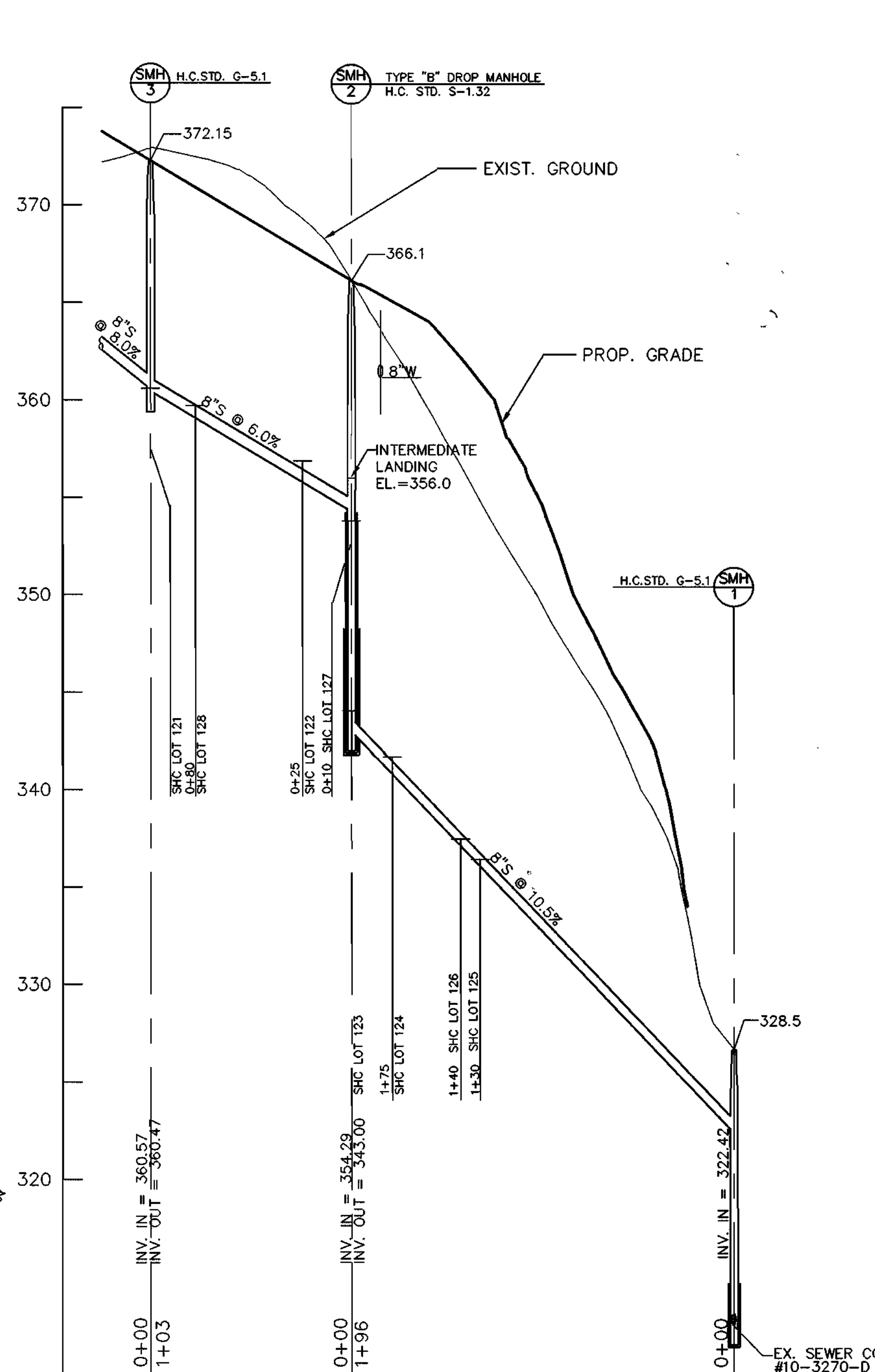




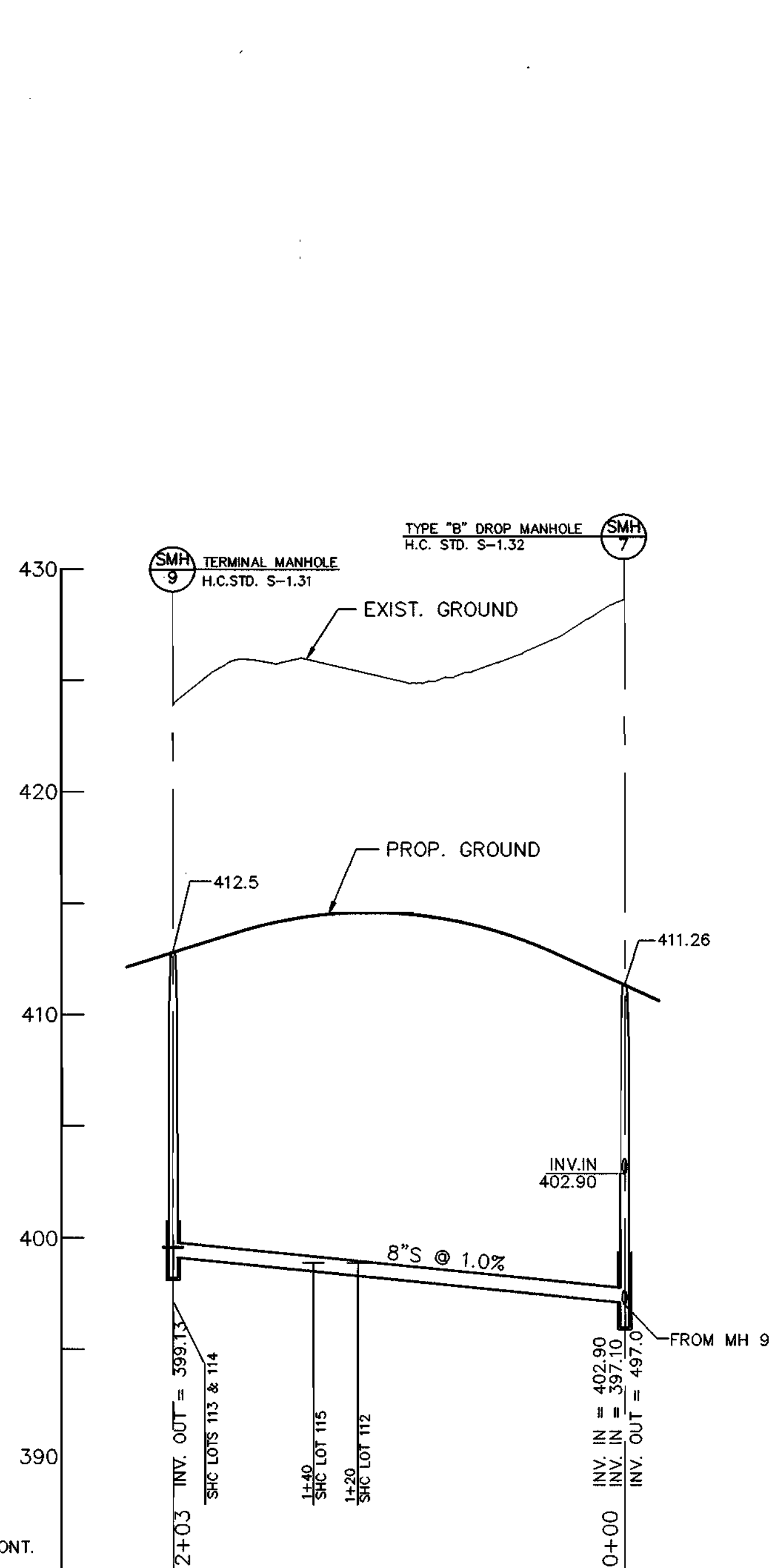
**8" SEWER PROFILE**  
SCALE: HOR. 1"=50'  
VER. 1"=5'



**8" SEWER PROFILE**  
SCALE: HOR. 1"=50'  
VER. 1"=5'



**8" SEWER PROFILE**  
SCALE: HOR. 1"=50'  
VER. 1"=5'



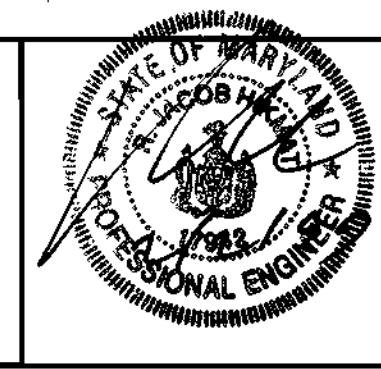
**8" SEWER PROFILE**  
SCALE: HOR. 1"=50'  
VER. 1"=5'

977015.DWG\FINAL\W&S\SEW-PROF

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
*Robert Benner*  
CHIEF, BUREAU OF UTILITIES  
DATE: 3-3-99

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND  
*John J. ...*  
CHIEF, DEVELOPMENT ENGINEERING DIVISION  
DATE: 3/15/99

**MILDENBERG, BOENDER & ASSOC., INC.**  
Engineers Planners Surveyors  
5072 Dorsey Hall Drive, Suite 202, Elkton City, Maryland 21042  
(410) 997-0296 Ball. (301) 621-5521 Wash. (410) 997-0298 Fax



engineering	MMP				
illustration	RCJ				
approval	RJH				
project	977015	K.E.I.	ASPHALT CONDITIONS ADDED TO PLAN	01/25/99	
date	FEB. 1999	BY	NO.	REVISION	DATE

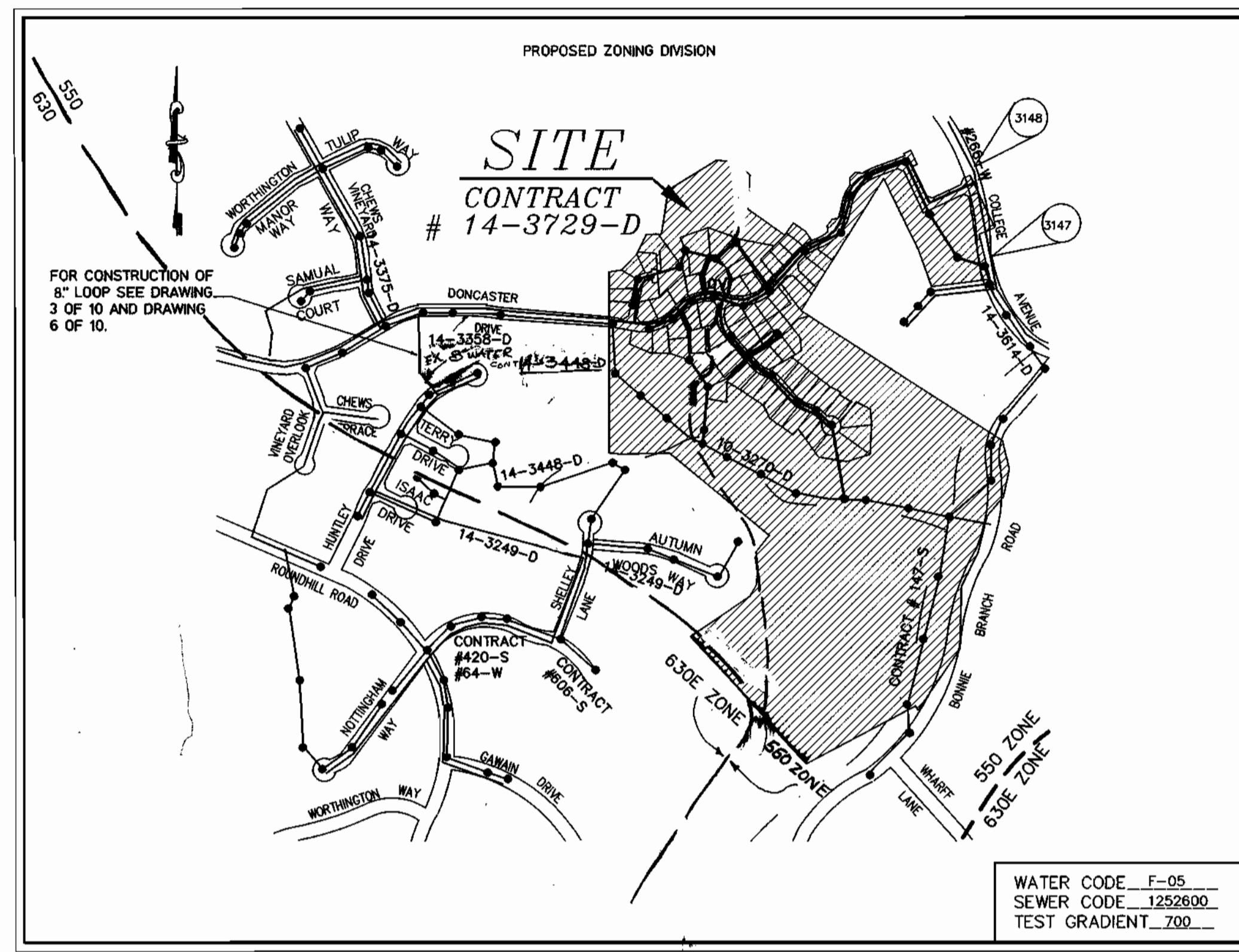
**SEWER PROFILES**  
600' SCALE MAP NO. 31 BLOCK NO. 3, 4

**AUTUMN VIEW, SECTION 3**  
LOTS 76 - 149  
CONTRACT NO. 14-3729-D  
SECOND ELECTION DISTRICT  
HOWARD COUNTY

scale  
HOR. 1"=50'  
VER. 1"=5'  
**10 OF 10**

**QUANTITY TABLE**

ITEMS	QUANTITIES		TYPE	MANUFACTURER/SUPPLIER
	ESTIMATED	QUANTITIES		
STANDARD MH (HO. CO. STD.G-5.01)	22	22	PRECAST	ATLANTIC
DROP MH, TYPE "B" (HO. CO. STD. S-1.32)	5	5	PRECAST	ATLANTIC
TERMINAL MH (HO. CO. STD. S-1.31)	5	5	PRECAST	ATLANTIC
MANHOLE, VERTICAL FEET	510 L.F.			
8" SEWER MAIN	2,296 L.F.	2,238	P.V.C.	J.M. BELAIR RD SUPPLY
8" DIP	2,792 L.F.	2,665	D.I.P.	J.M. BELAIR RD SUPPLY
4" SEWER HOUSE CONNECTION	2,171 L.F.	1,189	P.V.C./D.I.P.	J.M. BELAIR RD SUPPLY
# SEWER HOUSE CONNECTION	78 EACH	78 EA.		
# MH CONNECTIONS	14 EACH	14 EA.		
8" WATER	4,400 L.F.	4,278	D.I.P.	
4" WATER	1,037 L.F.	885	D.I.P.	
1" WATER HOUSE CONNECTION	1,816 L.F.	2,088	KOPPER	
1 1/2" WATER HOUSE CONNECTION	57 L.F.	60	KOPPER	
# 1" WHC	88 EACH	73		
# TWHC	2 EACH	2		
AIR RELEASE MH	1 EACH	1 EA.	PRECAST	ATLANTIC
F.H.	10 EACH	9 EA.	S.N.F.H.	MUELLER BELAIR RD SUPPLY
8" x 8" T	7 EACH	7 EA.	D.I.P.	U.S.
8" x 6" T	10 EACH	9 EA.	D.I.P.	U.S.
8" x 4" T	4 EACH	4 EA.	D.I.P.	U.S.
8" V	18 EACH	18 EA.	R.S.	
6" V	10 EACH	9 EA.	R.S.	
4" V	7 EACH	4 EA.	R.S.	
8" CAP & BUTTRESS	8 EACH	7 EA.	D.I.P.	U.S.
4" CAP & BUTTRESS	3 EACH	4 EA.	D.I.P.	U.S.
1/16 H.B. (8")	6 EACH	3 EA.	D.I.P.	U.S.
1/8 H.B. (8")	2 EACH	1 EA.	D.I.P.	U.S.
1/16 H.B. (4")	3 EACH	1 EA.	P.I.P.	U.S.
12" x 8" TAPPING SLEEVE & VALVE	1 EACH	1 EA.	STAINLESS R.S.	
8" x 8" TAPPING SLEEVE & VALVE	1 EACH	1 EA.	STAINLESS R.S.	BELAIR RD SUPPLY
1/32 H.B. (8")	1 EACH			
NAME OF UTILITY CONTRACTOR: C.C.S.				
SURVEY AND DRAFTING DIVISION AS-BUILT DATE				



**VICINITY MAP**  
SCALE: 1"=600'

TYPE OF BUILDING	SFD
No. OF UNITS	72
No. OF WATER HOUSE CONNECTION	72
No. OF SEWER HOUSE CONNECTIONS	72
DRAINAGE AREA	BOUNIE BRANCH, PATAPSCO
TREATMENT PLANT	PATAPSCO WASTEWATER TREATMENT PLANT, BALTIMORE

**GENERAL NOTES**

- APPROXIMATE LOCATION OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SUPPLY. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
- ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATES.
- ALL VERTICAL CONTROLS ARE BASED ON U.S.G.S. DATA.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- CLEAR ALL UTILITIES BY A MINIMUM OF 6". CLEAR ALL POLES BY 2'-0" MINIMUM OR TUNNEL AS REQUIRED. THE OWNER HAS CONTACTED THE UTILITY COMPANIES AND HAS MADE ARRANGEMENTS FOR BRACING OF POLES AS SHOWN ON THE DRAWINGS. IN THE EVENT THE CONTRACTOR'S WORK REQUIRES THE BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER FOR BRACING OF ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONEY OWED TO THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF THE POLES.
- FOR DETAILS NOT SHOWN ON THE DRAWINGS, AND FOR MATERIALS AND CONSTRUCTION METHODS USE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAIL FOR CONSTRUCTION (LATEST EDITION). THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB.
- WHERE TEST PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL AT THE LOCATION OF THE TEST PIT. A NOTE OR NOTES CONTAINING THE RESULTS OF THE TEST PIT OR PITS IS INCLUDED ON THE DRAWINGS. EXISTING UTILITIES IN THE VICINITY OF THE PROPOSED WORK FOR WHICH TEST PITS HAVE NOT BEEN DUG SHALL BE LOCATED BY THE CONTRACTOR TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS AT HIS OWN EXPENSE. CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:  
STATE HIGHWAY ADMINISTRATION (410) 531-5533  
BG & E CO. CONTRACTOR SERVICES (410) 850-4620  
BG & E CO. UNDERGROUND DAMAGE CONTROL (410) 787-9068  
MISS UTILITY 1-800-257-7777  
COLONIAL PIPELINE CO. (410) 795-1390  
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS BUREAU OF UTILITIES (410) 313-4900
- TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT. TREES AND SHRUBS LOCATED OUTSIDE THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
- CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OF THE MAIN.
- THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410)313-2450 AT LEAST FIVE (5) WORKING DAYS BEFORE ANY OPEN CUT OF ANY COUNTY ROAD OR BORING/JACKING OPERATION IN COUNTY ROADS FOR LAYING WATER/SEWER MAINS OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPW REQUIREMENTS PER SECTION 18.114(c) OF HOWARD COUNTY CODE.
- ALL WATER MAINS TO BE D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
- TOPS OF ALL WATER MAINS TO HAVE A MINIMUM OF 3-1/2" COVER UNLESS OTHERWISE NOTED.
- VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
- ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
- FIRE HYDRANTS SHALL BE SET TO THE BURY LINE ELEVATIONS SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE STRAPPED AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS. SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1000 AND 1005 OF THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
- ALL WATER HOUSE CONNECTIONS SHALL BE FOR INSIDE METER SETTING UNLESS OTHERWISE NOTED ON PLANS OR IN SPECIFICATIONS.
- FOR SPRINKLER SYSTEM FOR ALL TOWNHOMES OR MULTI-FAMILY DWELLING UNITS SHOULD HAVE A MINIMUM OF 1" CONNECTION WITH A 3/4" METER.
- ALL SEWER MAINS SHALL BE P.V.C. OR D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
- FORCE MAINS SHALL BE D.I.P. ONLY.
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVERS, STANDARD DETAIL G5.52. WHERE WATERTIGHT MANHOLE FRAME AND COVER IS USED, SET TOP OF FRAME 1' - 6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATES THAT CELLAR CANNOT BE SERVED.
- STATIONING SHOWN IS WATER MAIN AND CENTER LINE STATIONING.
- CONTRACTOR TO VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION.
- SEDIMENT CONTROL TO BE PROVIDED BY F-99-45.
- ALL SEWER HOUSE CONNECTIONS TO BE 4" IN SIZE.
- ALL WATER HOUSE CONNECTIONS TO BE 1" IN SIZE UNLESS OTHERWISE NOTED.
- ALL CELLARS WILL HAVE SERVICE TO LOWEST FLOOR UNLESS OTHERWISE NOTED.
- THE EXISTING WELL AND SEPTIC SERVING EXISTING HOUSE(S) ARE TO BE ABANDONED.
- STORM DRAIN SYSTEM INDICATED FOR INFORMATIONAL PURPOSES ONLY, SEE ROAD PLANS FOR CONSTRUCTION DATA.
- COMPACTION IN FILL AREAS TO BE 95% AS DETERMINED PER AASHTO T-180.

**EROSION AND SEDIMENT CONTROL FOR THIS CONTRACT IS PROVIDED UNDER F-99-45**

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

*Bruce T. Taylor, Pres* 2/9/99  
DEVELOPER'S SIGNATURE DATE

*R. Jacob Hikmat* 2/25/99  
ENGINEER'S SIGNATURE DATE

*Cheryl Simmons* 3/8/99  
USDA-NATURAL RESOURCES CONSERVATION SERVICE DATE

*John R. Roberts* 3-8-99  
HOWARD SCD DATE

PLAN REFERENCE NUMBERS

S-96-15
P-98-10
F-99-45

**CONTRACT NO.: 14-3729-D**  
**AUTUMN VIEW, SECTION 3, LOTS 76-149**  
**WATER AND SEWER MAIN EXTENSIONS**  
**HOWARD COUNTY, MARYLAND**  
**DEPARTMENT OF PUBLIC WORKS**

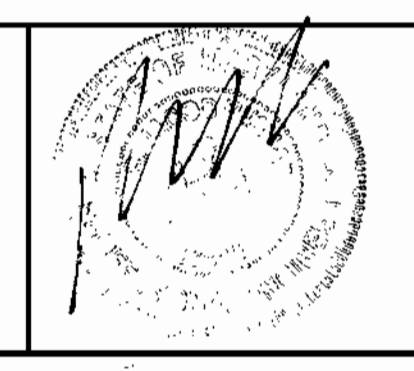
**INDEX OF DRAWINGS**

NO.	DESCRIPTION
1	TITLE SHEET
2	WATER AND SEWER PLAN
3	WATER AND SEWER PLAN
4	WATER PROFILES
5	WATER PROFILES
6	WATER PROFILES
7	SEWER PROFILES
8	SEWER PROFILES
9	SEWER PROFILES
10	SEWER PROFILES

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
*Robert M. Beaman* 3-3-99  
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND  
*Chris Beaman* 3/15/99  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

**MILDENBERG, BOENDER & ASSOC., INC.**  
Engineers Planners Surveyors  
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042  
(410) 897-0296 Fax: (301) 621-5531 Wash. (410) 997-0288 Fax



engineering	MMP	illustration	RCJ	approval	RJH	project	M.B.A. 2	K.C.T. 1	UPDATE QUANTITY TABLE	ASBUILT CONDITIONS ADDED TO PLAN	date	FEB. 1999	BY	NO.	REVISION	DATE

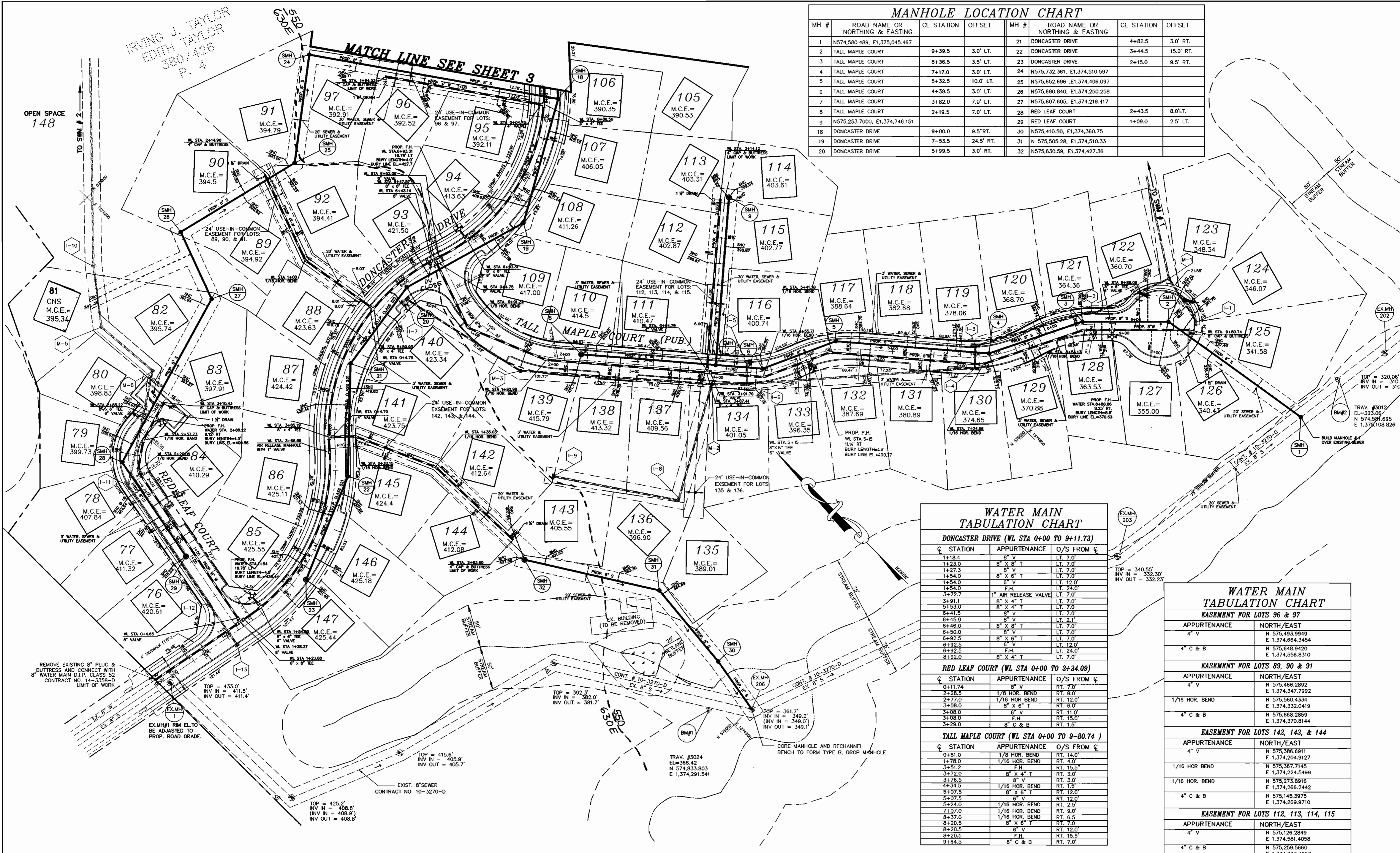
**TITLE SHEET**  
600' SCALE MAP NO. 31 BLOCK NO. 3.4

**AUTUMN VIEW, SECTION 3**  
LOTS 76 - 149  
CONTRACT NO.: 14-3729-D  
SECOND ELECTION DISTRICT  
HOWARD COUNTY

IRVING J. TAYLOR  
EDITH TAYLOR  
380/426  
P. 4

### MANHOLE LOCATION CHART

MH #	ROAD NAME OR NORTHING & EASTING	CL. STATION	OFFSET	MH #	ROAD NAME OR NORTHING & EASTING	CL. STATION	OFFSET
1	N574,580.489, E1,375,045.467			21	DONCASTER DRIVE	4+82.5	3.0' RT.
2	TALL MAPLE COURT	9+39.5	3.0' LT.	22	DONCASTER DRIVE	3+44.5	15.0' RT.
3	TALL MAPLE COURT	8+36.5	3.5' LT.	23	DONCASTER DRIVE	2+15.0	9.5' RT.
4	TALL MAPLE COURT	7+17.0	3.0' LT.	24	N575,732.361, E1,374,510.597		
5	TALL MAPLE COURT	5+32.5	10.0' LT.	25	N575,652.696, E1,374,406.097		
6	TALL MAPLE COURT	4+39.5	3.0' LT.	26	N575,690.840, E1,374,250.258		
7	TALL MAPLE COURT	3+82.0	7.0' LT.	27	N575,607.605, E1,374,219.417		
8	TALL MAPLE COURT	2+19.5	7.0' LT.	28	RED LEAF COURT	2+43.5	8.0' LT.
9	N575,253.7000, E1,374,746.151			29	RED LEAF COURT	1+09.0	2.5' LT.
18	DONCASTER DRIVE	9+00.0	9.5' RT.	30	N575,410.50, E1,374,360.75		
19	DONCASTER DRIVE	7-53.5	24.5' RT.	31	N 575,505.28, E1,374,510.33		
20	DONCASTER DRIVE	5+99.5	3.0' RT.	32	N575,630.59, E1,374,427.36		



### WATER MAIN TABULATION CHART

#### DONCASTER DRIVE (WL STA 0+00 TO 9+11.73)

STATION	APPURTENANCE	O/S FROM C
1+18.4	8" V	LT. 7.0'
1+23.0	8" X 8" T	LT. 7.0'
1+27.3	8" V	LT. 7.0'
1+34.0	8" X 6" T	LT. 7.0'
1+54.0	6" V	LT. 12.0'
1+54.0	F.H.	LT. 24.0'
3+72.7	1" AIR RELEASE VALVE	LT. 7.0'
3+91.1	8" X 4" T	LT. 7.0'
5+53.0	8" X 4" T	LT. 7.0'
6+41.5	8" V	LT. 7.0'
6+45.9	8" V	LT. 2.1'
6+46.0	8" X 8" T	LT. 7.0'
6+50.0	8" V	LT. 7.0'
6+92.5	8" X 6" T	LT. 7.0'
6+92.5	6" V	LT. 12.0'
6+92.5	F.H.	LT. 24.0'
8+92.0	8" X 4" T	LT. 7.0'

#### RED LEAF COURT (WL STA 0+00 TO 3+34.09)

STATION	APPURTENANCE	O/S FROM C
0+11.74	8" V	RT. 7.0'
2+28.5	1/8 HOR. BEND	RT. 8.0'
2+77.0	1/16 HOR. BEND	RT. 12.0'
3+08.0	8" X 6" T	RT. 6.0'
3+08.0	6" V	RT. 11.0'
3+08.0	F.H.	RT. 15.0'
3+29.0	8" C & B	RT. 1.5'

#### TALL MAPLE COURT (WL STA 0+00 TO 9-80.74)

STATION	APPURTENANCE	O/S FROM C
0+81.0	1/8 HOR. BEND	RT. 14.0'
1+78.0	1/16 HOR. BEND	RT. 4.0'
3+51.2	F.H.	RT. 15.5"
3+72.0	8" X 4" T	RT. 3.0'
3+76.5	8" V	RT. 3.0'
4+14.5	1/16 HOR. BEND	RT. 1.5'
5+07.5	8" X 6" T	RT. 12.0'
5+07.5	6" V	RT. 12.0'
5+24.0	1/16 HOR. BEND	RT. 2.5'
7+07.0	1/16 HOR. BEND	RT. 9.0'
8+37.0	1/16 HOR. BEND	RT. 6.5'
8+20.5	8" X 6" T	RT. 7.0'
8+20.5	6" V	RT. 12.0'
8+20.5	F.H.	RT. 15.5'
9+84.5	8" C & B	RT. 7.0'

### WATER MAIN TABULATION CHART

#### EASEMENT FOR LOTS 96 & 97

APPURTENANCE	NORTH/EAST
4" V	N 575,493.9949 E 1,374,664.3454
4" C & B	N 575,648.9420 E 1,374,556.8310

#### EASEMENT FOR LOTS 89, 90 & 91

APPURTENANCE	NORTH/EAST
4" V	N 575,466.2892 E 1,374,347.7992
1/16 HOR. BEND	N 575,560.4334 E 1,374,332.0419
4" C & B	N 575,668.2859 E 1,374,370.8144

#### EASEMENT FOR LOTS 142, 143, & 144

APPURTENANCE	NORTH/EAST
4" V	N 575,386.6911 E 1,374,204.9127
1/16 HOR. BEND	N 575,367.7145 E 1,374,224.5499
1/16 HOR. BEND	N 575,273.8916 E 1,374,266.2442
4" C & B	N 575,145.3975 E 1,374,269.9110

#### EASEMENT FOR LOTS 112, 113, 114, 115

APPURTENANCE	NORTH/EAST
4" V	N 575,126.2849 E 1,374,581.4058
4" C & B	N 575,259.5660 E 1,374,737.4257

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*Robert R. ...*  
3-3-99  
DATE

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND

*Edith Taylor*  
3/15/99  
DATE

**MILDENBERG, BOENDER & ASSOC., INC.**  
Engineers Planners Surveyors  
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042  
(410) 997-0296 Fax: (301) 621-5521 Wash. (410) 997-0298 Fax.



engineering	MMP			
illustration	MMP			
approval	RJH			
project	MMP	2	RELOCATE F.H.	7/6/00
	MMP	1	REVISED SHC TO LOT 81	2/2000
date				
FEB. 1999	BY	NO.	REVISION	DATE

**WATER AND SEWER PLAN**

600' SCALE MAP NO. 31 BLOCK NO. 3, 4

**AUTUMN VIEW, SECTION 3**

LOTS 76 - 149  
CONTRACT NO. 14-3729-D  
SECONDELECTION DISTRICT  
HOWARD COUNTY

scale  
1" = 50'  
2 OF 10